

GREEN'S Fruit Grower

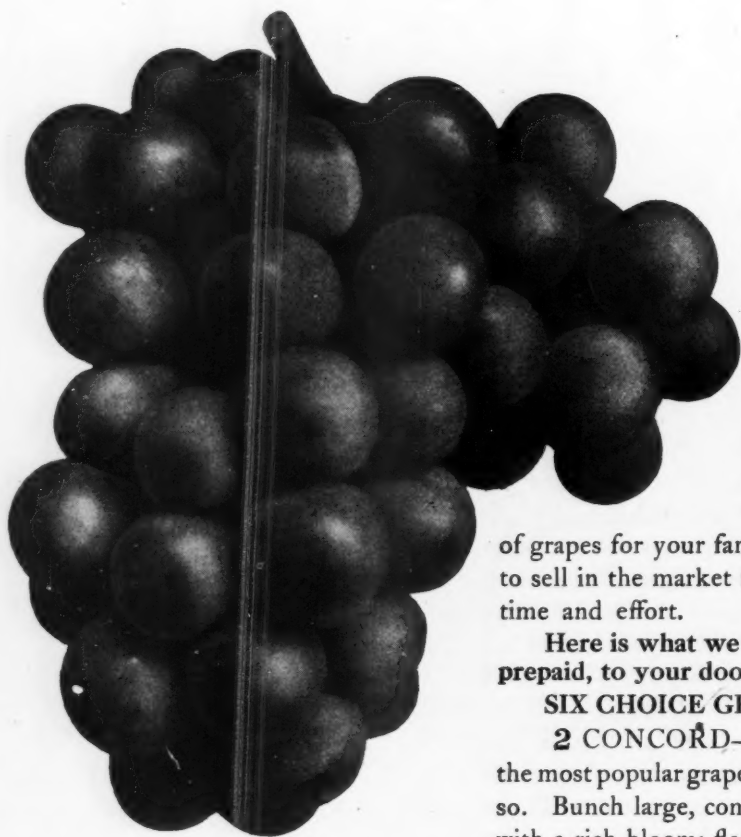
for the fruit growing farmer and his family

APRIL, 1911



A RARE CHANCE—SOME REMARKABLE OFFERS

Six Grape Vines given to you if you will secure 6 subscribers to Green's Fruit Grower at 25c. each.



of grapes for your family and friends and enough to sell in the market for many times the cost of time and effort.

Here is what we will send you, all charges prepaid, to your door for Spring planting.

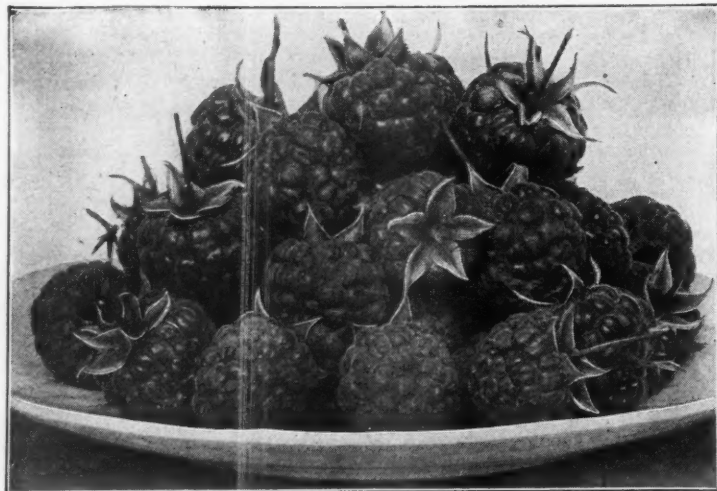
SIX CHOICE GRAPE VINES, as follows:

2 CONCORD—Black; early. Decidedly the most popular grape in America, and deservedly so. Bunch large, compact; berries large, covered with a rich bloom; flesh juicy, sweet, tender; vine

a strong grower. For general cultivation the most reliable variety.

2 WORDEN—Black. Bunch large, compact; berries very large, skin thin. Superior to the Concord in the following points: It is better in quality, has a larger berry, a more compact and handsome cluster and ripens five or ten days earlier. It fully equals Concord in vigor, health and productiveness.

2 NIAGARA—White. Bunch very large and handsome; berries large, round; skin thin, tough, does not crack; melting, sweet, with a flavor and aroma peculiarly its own; ripens with Concord, sometimes a little earlier. Vine productive.



SYRACUSE RED RASPBERRY

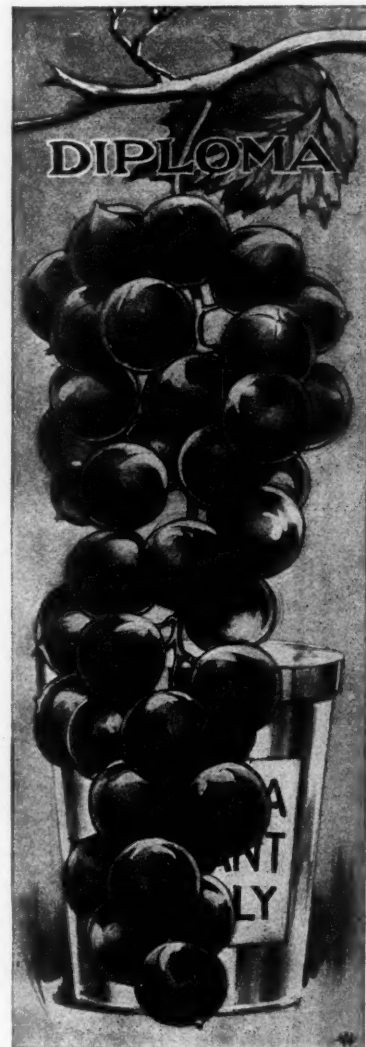
The Syracuse new hardy red raspberry has been growing at Green's Fruit Farm and fruiting there for the past ten years. This is no experiment with us. It has been thoroughly tested and has proved to be the largest and most productive of all bright red highly flavored raspberries. It has no rival among hardy varieties. Its color is even brighter than the average berry. Syracuse raspberry does not make many sucker plants. This is greatly in its favor for the gardener or fruit grower who objects to the rapid increase of sucker plants on the Cuthbert red raspberry. But the fact that Syracuse raspberry does not multiply plants rapidly will keep the plants high in price for many years. Syracuse is not an over-bearing raspberry, but it continues in fruit six weeks, which is a remarkable qualification for any raspberry. Taking it all in all this is the greatest red raspberry on earth. It originated at Syracuse, N. Y., near Rochester, hence its name.

We offer as follows: Collect 25 cents each from four of your friends, sending us the \$1.00, and for your trouble we will send you, in time for spring planting, three well-rooted plants of this new fruit.

GREEN'S GRAPE OFFER

If you will get six of your neighbors to subscribe to Green's Fruit Grower we will allow you to take these trial subscriptions at 25c. each. Send us the \$1.50 and we will send each one the magazine for one year.

For a very little effort on your part we will send you, free, all charges prepaid, six selected grape vines, enough to make a SHADY RETREAT or a secluded arbor in which to entertain your friends and family all through the summer days and evenings. Just think of what a pleasure it would be to have a shady cosy corner in your door yard or garden surrounded by the beautiful foliage all summer long. Then in the autumn you will have many dollars' worth of beautiful clusters



It doesn't matter whether you live in the city or country, there is always some spot to be found around your home where grape vines will make a beautiful Cosy Corner or Shady Retreat; there is nothing in the line of growing things that will give you greater satisfaction or that will more fully repay you than a grape arbor.

DIPLOMA CURRANT

The Diploma is a new currant, originated by Jacob Moore, the man who originated the Brighton Grape, Diamond Grape, Red Cross Currant and many other valuable fruits. He says that this is the largest of currants, very productive and vigorous. Chas. A. Green testifies that this is not claiming too much for this remarkable variety. It is destined to create a new era in currant culture.

Why don't you try the New Diploma Currant? If you will do this you can do so without any expense whatever, simply collect 25 cents each from four of your friends for a year's subscription to Green's Fruit Grower. Send us \$1.00 and we will send them the paper one year, and we will also send you three (3) well-rooted plants of the New Diploma Currant for your trouble. They will be sent in time for spring planting and by careful propagation you can soon increase by cuttings and the result will be a small plantation of this new and very profitable variety. Remember the old saying, "Great oaks from little acorns grow."

GREEN'S FRUIT GROWER, ROCHESTER, NEW YORK

GREEN'S FRUIT GROWER WILL KEEP YOU POSTED BETTER THAN ANY DOZEN OTHERS PUT TOGETHER, NOT ONLY ON FRUIT GROWING BUT ON MANY OTHER SUBJECTS.

GREEN'S FRUIT GROWER

A Monthly Publication for the Fruit Growing Farmer and His Family.

CHARLES A. GREEN, Editor

Volume 31.

ROCHESTER, N. Y., APRIL, 1911.

Number 4.

ORCHARD PRACTICE

By W. J. GREEN, of the Ohio Agricultural Experiment Station.

Starting an Apple Orchard.—Soil suitable for an apple orchard is not hard to find if one avoids that which is too wet for farm crops and is not susceptible of good artificial drainage. Soil upon which elm, black ash, scarlet maple and pin oak trees thrive is not suitable.

Orchard Soil Indicated by Trees and Crops.—Sugar maple and chestnut trees usually indicate apple tree land and soil where wheat, oats and potatoes thrive is usually suitable for an apple orchard. The soil may range from that having a large percentage of sand and gravel in it, to a moderately heavy clay, and should be fertile enough to grow fairly good farm crops.

Site and Slope.—The site may be a hill or a level plain, but the former is less liable to be visited by frosts than the latter.

A north slope may well be chosen for such winter sorts as drop early, because of premature ripening, and the opposite side of the hill affords the right condition for the high coloring of varieties which are tardy in maturing. The eastern side of a hill is usually more fertile than the western, hence is to be chosen for those varieties which need plenty of food to bring the fruit to a marketable size.

Choice of Cultural Methods.—In case an orchard is to be tilled the soil requires about the same preparation for the trees as should be given for farm crops.

It is well to settle, at the outset, whether the orchard is to be cultivated or kept in grass and mulched. The choice is to be determined largely by local conditions. On hillsides, where washing is likely to occur, tillage may be impracticable. In such cases the only way to prevent serious erosion is by keeping the orchard in grass and to use straw, corn stalks, or some other material about the trees as a mulch. The problem presents greater difficulties when the soil will not support an ample growth of grass. This necessitates the use of manure or chemical fertilizers, along with the straw or other material, to promote the growth of grass. Lime may be very helpful on sour soils to promote the growth of white clover and Kentucky blue grass. On level land either method may be followed successfully and, in any case, more depends upon the man than upon the plan adopted.

Advantages of the Mulch System.—The chief advantages of the mulch system are that the trees begin bearing at an earlier age, the fruit is more highly colored, and there is less erosion than under cultivation.

Advantages of Cultivation.—The advantages in favor of cultivation over grass and mulch are, reduction of the cost of growing the orchard, because of the income from the crops which may be grown, and the elimination of the dangers of fire and mice.

How to Use Mulch.—If an apple orchard is to be grown in grass, a mulch of coarse manure or some material which will hold moisture, should be placed on the ground around the trees as soon as planted. At first the circle of mulch need not be more than three feet across, but more material is to be added each year and the mulched area should extend a little beyond the spread of the branches. The grass between the rows of trees should be cut once or twice each season and placed about the trees or left to decay where it falls. The bringing in of material for mulching will be necessary sooner or later, but

earth thrown about them, but no mulch is to be applied until the following spring.

Low Heads Desirable.—The formation of suitable tops is most easily secured by using one-year-old trees, but two, or even three-year-old trees, may be properly shaped by cutting off all side branches and starting a new head at the proper height. Low headed trees are more satisfactory than those with high tops. Two feet is about the right height from the ground to start heads, and the branches should rise, on the line of a spiral, as buds are placed on the twigs.

The reduction of both tops and roots by severe pruning does much to insure success in planting and makes possible the formation of a well balanced head at the start.

we cannot afford to ship such fruit.

In this short article I can only mention a few of the important points of creating an order trade for your fruit, so you may make your own prices.

I have built up a trade that nearly all of my best fruit for twenty years, has been sold in almost every state in the Union, even to London, Eng., and Cork, Ireland, and some of my customers have been regular buyers for the past twenty years. How did I get this trade? Some twenty-five years ago a young agricultural student visited my orchard and was so impressed with their appearance he wrote up quite a lengthy article enumerating the different fruits he saw growing. This article, published in the "Prairie Farmer," brought me many inquiries for these fruits, and orders for same, and we still have many of these for customers.

The one secret is that we so put up our fruit we have never had a complaint and many times get letters that do us more good than the money received. There have been times, I could see I was going to have more fruit of some certain kinds than I had places for. I would say such and such towns ought to be good markets for this fruit. I would write the express agent to give me the names of reliable fruit dealers in his town. He would gladly do this, as it would give his company business. I would write them, and to give a typical illustration, a man in Marshall, Mich., said he had some of the same variety of fruit, but would like to try a few packages of mine. He ordered five cases, which I sent on, and as soon as they were received he telegraphed "to double the shipment," and the next day a telegram to "double again," and followed it up until I had to shut him off.

One more illustration: On all of the packages to the trade, I put my name and ask the dealer to guarantee the package in this way: If he is selling for say 60 cents a basket, to say to his customers if it does not pan out O. K. to come back and get \$1.20. I have never had to pay back the double price. Now in these few points in my judgment lay the profits in fruit growing.

Big Apple Brings \$70.—One apple was recently sold at auction in Covent Garden Market, London, England, for fourteen guineas (about \$70). It was a specimen of Gloria Mundi weighing twenty-seven ounces, which was sixteen inches in circumference and five inches high. The "Gardener's Chronicle" reports a Warner's King apple exhibited in 1888 which weighed just over two pounds. This big apple I found in fruit at Green's fruit farm when I bought the farm over thirty years ago. It is a big producer. The fruit is unusually perfect and of good quality.

Conservation Fear.

"I see that they're making brandy from sawdust."

"Good gracious, as if the forests were not disappearing fast enough as it is!"—St. Louis "Globe-Democrat."



In front of my city house were four old cherry trees when I moved on to the place. The farmer owner said that these cherry trees had never failed to bear a large crop of fruit each year. He said he had sold \$64.00 worth of cherries from these four trees in one year. I have no reason to disbelieve this but he must have received a fancy price for the fruit, and the crop must have been an unusual one. No one should plant a cherry orchard, expecting so large a crop as stated above. I have lived on this place nearly twenty years and the trees have borne large yearly crops without one failure. The variety is what I call Green's Black Tartarian. The variety is not quite like the old Black Tartarian, which I have growing on trees near by. I have a suspicion that these trees are the Old Black Heart. The fruit is large with no inclination to rot, remaining eatable on the tree for three weeks.—C. A. Green. The lady sitting near the cherry tree is the German girl of whom I spoke; she is a University girl with means and spent one summer on my farm learning methods that she could take back and put into practice in a German fruit and vegetable garden, which she owns.—The Agricultural Experts Association, George T. Powell, President.

additions of this sort increase the supply of humus, which means more plant food and a more uniform water content of the soil.

Cover Crops, Uses of.—In case of cultivated orchards, crops may be grown and removed for a limited period, but to avoid depleting the supply of humus it is necessary to plow under clover, soy beans, cow peas, rye, vetch or other plants. The growth of cover crops should begin at an early period of the orchard's existence. If delayed too long and other crops are grown and removed exhaustion of humus will result and it will become impossible to secure a satisfactory growth of plants to plow under because of the shade of the trees.

Soy beans may be sown in rows in May or June, so as to admit of cultivation, following with a crop of rye to be plowed under in the spring. This course may be varied to suit the conditions and needs of the trees.

Wrong Methods.—Clean cultivation of orchards, without the use of cover crops, and to allow trees to stand in grass without mulching are equally bad practices.

Time of Planting.—Apple trees may be planted either in the fall or spring, but on sandy or gravelly soil the former season is to be preferred. Fall planted trees should have a small mound of

Reliable Nurseries.—What nurseries are reliable and sell trees which are true to name are questions to which absolute and definite answers cannot be given. Most nurserymen make some mistakes, but the blame for the most serious blunders and misrepresentations must be placed upon irresponsible dealers. It is as easy to learn the reputation of nurserymen as of other business men.

Marketing of Fruit.

Written for Green's Fruit Grower by J. N. Stearns.

After forty-five years experience in fruit growing, I am satisfied this is the one important thing in making fruit growing profitable.

Most people, with care and study, can grow good fruit, but the important thing is to get the largest margin above cost of production in selling.

When I first began in the fruit business, I fully determined I would not offer for sale any fruit I would not buy, for the price I expected to get if I wanted fruit.

Now this is not only the line of honesty, but it is business. A few years ago, a neighbor was going through my orchard, and saw several bushels of peaches thrown out on the ground. What does that mean? Well, I said,



Thorn Apples.

No, the above cut does not represent cherries. It represents thorn apples. You have seen the wild thorn filled with white blossoms on the farm fence rows. They are beautiful smallish trees. Nurserymen have selected varieties with double blossoms, some white, some red. This makes an attractive shrubby tree for the lawn. Plant such a thorn tree this spring, red in color, double blossoming.

About Pruning Trees.

Editor of Green's Fruit Grower: The information I seek is this: Should trees be pruned every spring and if so is this about the right way: cut back last year's growth about one-half and thin out about half of the last year's growth or in other words on young trees keep the branches about ten inches apart and cut off any branches that cross. The suckers that spring up each year, are they regarded as the new wood? The suckers that spring up on old apple trees each year, should they all be taken off or should the ones that have room to grow or say leave one about every foot or so on and cut back about one-half of their growth? What I mean by every foot or so is on a limb where there is plenty of room or should the ones near the trunk of the tree be cut off entirely and only the ones on the limbs that extend out from the trunk and near the ends of the limbs be left where there is room for them without crowding, or should the trees be watched during the summer and as these suckers spring out cut them off? Should the heavy limbs of a tree be cut back or should they be left on to bear the new wood that bears the fruit. My idea of pruning is this: (young trees) don't let them get too high, don't let the branches grow wild and cross one another, keep them on an average of ten to twelve inches apart on limbs that extend from the trunk, and about fifteen inches on the trunk on peach and plum and about twenty-four inches on the trunk on apple and pear. Thin out last year's growth about one-half and cut back remainder about one-half of growth, also trim off a little of the main branches. I will tell you of a little experience I had with one-half dozen plum trees my father set out several years ago on his residential place. He didn't understand pruning and never gave them much care and they grew rather wild for several years and the fruit they bore was rather small and a good part of it would be wormy, and some of it would fall to the ground half ripe. A year ago last spring I pruned the trees quite some and last summer the crop was very poor, so this spring I told one of the men to cut them back good as they were not much good anyhow, and when I came home that afternoon he had cut them back too much, only leaving the main limbs and had cut them back pretty near one-half. I am surprised that the trees are still living and I suppose it will be two or three years before we get any fruit from them. What do you lay the poor fruit supply to, not being pruned or poor stock of trees? The man told me he was cutting away and didn't realize the damage until he got down on the ground. Now seeing the damage a man can do before he realizes it, if I started to prune I would go at it very easy, and thin out sparingly, and watch out as I cut back the limbs, and thin out the suckers very sparingly or where they were headed for another or even liable to cause too much shade for the interior. I suppose though it makes lots of difference what kind of trees one gets. A good tree would no doubt have well endured poor treatment and some wouldn't bear under the very best care. I suppose the reason those plums fell off was that the tree

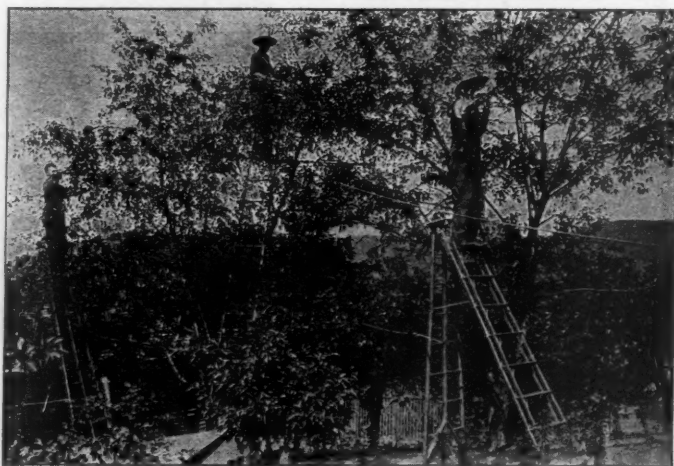
needed to be sprayed just before it came into blossom or sometime about then, to kill that bug if I am not mistaken quite some of the leaves curled up. Also another thing I don't understand is the spraying of trees. I wouldn't know how to tell if a tree had any disease or not. Is there a certain spray to apply to a tree every spring to keep it free from disease and bugs which get into the fruit as I have described in the plums? If so, what stage is it applied? Would you advise a man starting into fruit growing like I am going to do to hire an experienced man to come each year for a couple of years to do the pruning, and when it is time to spray to come also? But if there is a regular time each year to spray to keep off the fruit and leaf eating bug, couldn't one each year send in to the state experiment station a few branches of the trees and have them examined and if the tree did have any disease they could advise you what extra spraying you should do? If this could be done I think it would be best to have an experienced man do the pruning for the first year or so. The reason I write for so much information is this: I don't like to invest a large sum of money, and then have poor crops on account of bugs or improper treatment of trees. Of course, the chickens running among the trees would help keep them free from bugs. Could one plant an orchard of peaches or any

Spring Spraying with Lime-Sulphur Solution.

There should be much spraying this spring with the lime-sulphur solution and now is the time to begin to consider spray pumps, spraying accessories and spray material.

The following observations may be of value to growers as to what insects we have that are destroyed by the lime-sulphur, at what time the spraying should be done and why the lime-sulphur preparations are the universal dormant tree-sprays for this section, says E. P. Taylor, entomologist and horticulturist, in "The Intermountain Fruit Journal."

Peaches.—The principal pests for which peaches are sprayed in the spring are green peach aphids, twig borer, scale insects and brown mite. It has been thoroughly demonstrated that the lime-sulphur applied at any time of the spring will control any of the last three pests named but it has been found that in order to be effective against the green peach aphids lime-sulphur spraying must be done at egg-hatching time which is sometimes as early as the last of February or the first of March. An exact calendar date can not be given for this but the spraying should be when the eggs commence to hatch as determined by observations each spring. The lime-sulphur applied at this time is therefore an all-purpose spring spray for peaches. When the



This picture shows A. A. Halladay and his two sons gathering cherries from fifteen year old Early Richmond trees. There are about 150 of these large trees of this variety at Mapledell fruit farm, purchased at Rochester, N. Y. These trees have produced heavy crops of fruit annually for years. To gather the fruit from these large trees it is necessary to run ropes around the large branches and draw them up close together, and with long ropes guy the tops in three directions. Long iron pipes are used, resting in crotches of the trees to stand on, and also to rest the ends of ladders on. Cherry trees have very tender wood and it is not safe to go to the tops of these tall trees without staying them so as to prevent the swaying of the trees. To give something of an idea of the size of these fifteen year old trees I will say, the ladder used is twenty feet long, and the step-ladders are ten feet high. Yet there are seasons with a good crop of fruit on these 150 large trees when we have not been able to get cherries enough to make a pie for our own table, on account of the depredations of the birds.—A. A. Halladay.

other fruit so as to have an orchard bear one year and another bear another? What is the productive life of a peach and plum tree? Also a pear and apple? Now, Mr. Green, if you answer such letters as this in your paper if you would answer this one I would greatly appreciate it and if you do not if you will let me know what it is worth to answer this letter I will be very glad to pay you for it.—J. A. Whitchee.

C. A. Green's reply to J. A. Whitchee, N. J.: The only way to become an expert pruner of fruit trees is to work with an experienced pruner for several weeks or months. No one can explain by letter how trees should be pruned. The different kinds of fruit trees require different pruning, and each tree different from another as to what branches shall be removed. The main thought in pruning is to thin out the branches, removing any that seem likely to crowd the center of the tree or that will make it difficult for a man to climb up in the center of the tree to gather fruit. Three or four main branches are usually enough for an apple or pear tree, each of these limbs having many branches, but you will often find in orchards, apple and pear trees with ten or more main branches. Do not cut away many branches in any tree in one year. Cut out a few branches each year. All suckers should be cut off unless you desire the formation of a new branch where the sucker may happen to be. But little pruning should be done to bearing plum and cherry trees, for wounds do not heal so readily on these trees as on the apple and pear. Yes, there are sprays for every disease and every insect which attacks fruit trees. I send you a spray bulletin giving information. If you can get an experienced man to do the pruning and spraying, do not fail to secure his services. You can learn from him while he is working your orchard.

green peach aphid is not present the lime-sulphur may be postponed so as to just finish up before the blossoms open. The green aphid is, however, abundant in many orchards as eggs about the buds and it is going to have to be reckoned with in many cases this spring. Plums and other stone fruits may be sprayed along with peaches.

Apples.—The pests destroyed by spring spray on apples are green apple aphids and several other related species of aphids (not woolly aphids), San Jose, Howard and other related scales and the brown mite. Young apple orchards subject to heavy infestation by the green apple aphid should certainly be treated. Scale insects are readily killed by proper lime-sulphur spraying, and the brown mite also. Apples need not be sprayed as early in the spring as peaches but they should be begun in time to finish before the cluster buds open and if for green aphid it should be done when the eggs are hatching as determined by observations each spring.

Pears.—The pears need spring sprays of the lime-sulphur for Howard scale, San Jose scale and other scale insects as well as for the brown mite. This need not be done extra early in the spring but should be started in time to finish before cluster buds open.

C. A. Green's book tells of his early years on the homestead farm, then of fifteen years as a city banker. Then he is forced back to the farm again and begins the struggle of his life. He makes a success of fruit growing. His book tells graphically of his work on a run down farm and his efforts to make it profitable. Over 100,000 copies of this book have been sold. The price is 25c each, postpaid.

"How is it that your hens are so prolific?"

"I feed them on layer cake."—"Lippincott's."

Alfalfa Growing.

The article in the March issue of the Fruit Grower on alfalfa attracted my attention and as I have been a reader of the Fruit Grower for many years, will endeavor to give for the benefit of your many readers a few lines on alfalfa, from the home of alfalfa, the greatest of all hay crops.

Alfalfa seed should be sown the latter part of March or the early part of April, about twelve to fifteen pounds of seed to the acre and harrowed or brushed in. One of the best stands I ever saw was sown in two inches of snow, the ground had been prepared one day and that night two inches of snow fell and the seed was sown in the snow and allowed to go into the ground as the snow melted. Freezing weather will kill it if a cold wave catches it before it has three leaves, but after it gets three leaves it is frost proof. With ordinary good luck a crop of hay can be cut the latter part of the first year and after that time from three to seven cuttings each year owing to the length of the seasons.

For best results the hay should be cut when it first comes into bloom and the mower followed within three hours or less by a rake and the hay put in wind-rows to cure. By this method the finer leaves and best part of the hay is saved, and is the greatest hay known, poultry and hogs eat it with a relish and as a feed for dairy cows has no superior. Many farmers let it go to too rank a growth before cutting and stock then do not eat it up clean.

In some parts of the state the farmers cut the first crop for hay and the second for seed and others who raise seed pasture down the first growth with hogs or sheep and then cut the second growth for seed and again pasture the ground until winter.

The ground should be gone over at least once each spring with a disc harrow and manure spread freely during the winter.

As a hay crop three cuttings will yield from four to six tons and it will sell at \$7.50 to \$10 per ton.

Those who make a business of producing seed secure from \$40 to \$80 an acre for their seed and sell the hay after threshing to sheepmen for their sheep and get enough out of the hay to pay running expenses of the farm.

Many farmers in Millard county have received more than \$100 an acre for their seed.—Webb, Greene, 323 Atlas Block, Salt Lake City, Utah.

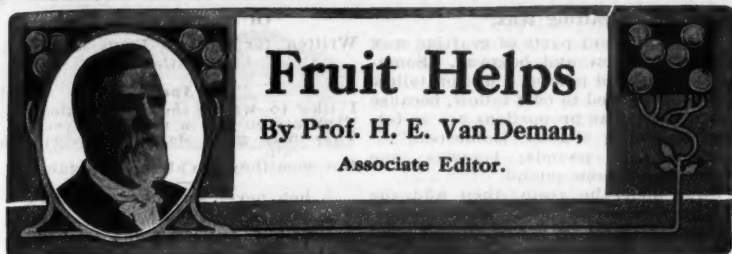
Experiments in Keeping Eggs.

The eggs were all wiped when fresh with a rag saturated with some antiseptic and packed tightly in salt, bran, etc. Eggs packed during April and May in salt, and which had been wiped with cotton seed oil, to which had been added boracic acid, kept from four to five months with a loss of nearly one-third, the quality of those saved not being good. Eggs packed in bran, after the same preliminary handling, were all spoiled after four months. Eggs packed in salt during March and April, after wiping with vaseline, to which salicylic acid had been added, kept four and five months without loss; the quality after four months being much superior to limed eggs. These packed eggs were all kept in barn cellars, the ordinary temperature of each box varying little from 66 degrees F., and each box was turned over once every two days. Little difference was observed in the keeping of the fertile or the infertile eggs, and no difference was noticeable in the keeping qualities of eggs from different fowls or from those on different rations.—Report of New York Experiment Station.

Size and Quality in Fruit.

Increase in quality is not a necessary attendant to decrease in size, says a correspondent. Every fruit grower who stops to reason upon the question must recall the fact that "seedling" apples are usually small and very poor in quality. The fallacy of associating size and flavor, as of other supposed parallelisms, arises from the fact that individual instances have been widened into generalizations. We wonder at the smallness of the Russets, the Early Joes, the Delawares, the Seckels, and the Doyennes, but we forget the Fall Pippins, the Hubbards, the Spys, the Greenings, the Brightons, the Anjous and the Boscs. But if it is a fallacy to associate increase of quality and decrease of size it is perhaps a greater one to associate high quality with low color. Red is a very prominent character in all the fruits, and wholly green fruits, even among the apples are rare.

A wise old owl sat on an oak, The more he heard the less he spoke. The less he spoke the more he heard; Let's imitate that wise old bird.—Ex.



Fruit Helps

By Prof. H. E. Van Deman,
Associate Editor.

Facts About Florida Lands—Land of Magnolia and the Palm.

Within the last few years there has been a great stir among northern people about going south to escape the severity of the winters and the climate of Florida has appealed to them most of all. There is nothing unreasonable about this and it is a pleasant change and might be profitable in many cases if no serious mistakes were made. But when the southern fever once takes hold of the mind all sorts of imaginations are apt to creep in and if one of the land boomers is met the result may be disastrous in the end. Knowing these facts there have arisen a number of crafty men who have taken advantage of these conditions and many of them are working schemes that are far from honorable or beneficial to the most of their victims.

Now I have known something of Florida for more than twenty years, by having traveled over about every section of the state, from Pensacola to Miami and I have long been and am now a land holder there. I believe in the present and future of Florida and think it is a good place to live, provided there is good judgment used in locating and in adjusting one's work to the climate and soil conditions.

It may be taken as a general fact that Florida land is poor and much of it is very poor. There is some of it that is fairly fertile but almost none that may be called rich, as northern and western lands are rich. There are almost no clay soils in Florida and it really requires some clay in any soil to make it substantially rich in plant food. Sandy soils are lacking in a reserve of potash and phosphorus, and Florida soils are sandy and the most of them intensely so. They are covered with scattering pine timber, except in patches, and that is about as sure a sign of poor soil as can be found anywhere. Pine trees grow on poor land because they do not require much potash; and they do not grow on rich soil because trees that require rich soil, such as the hard woods, flourish there and crowd out the pines. In fact, pine trees do not flourish on very rich land, strange as it may seem. Such soil seems to disagree with them, except certain species in the western volcanic and granitic soils and there are usually some hard woods among them. I have seen pine forests there on rich soils and good crops grown after them without any fertilizing. It is not so in the eastern states for there are no pine clearings in which this can be done, so far as I have seen them, and I have been in hundreds of them and from northern Michigan to southern Florida. In eastern Virginia, where I tried it, there was no use to plant crops in fresh pine clearings without adding plant food at the start. The same is true on one tract of land in which I am deeply interested in Florida. Our fertilizer bills are the chief obstacle to profit. The oranges, pomeloes and pineapples we are producing cost so heavily that it is hard to clear anything from them. The Cubans, who have a naturally fertile soil, produce and send these fruits to market at less cost and sometimes undersell us in our own markets.

The mild climate is the principal asset of Florida. It is delightful there and if the soil was fertile it would be twice as valuable for homes as it now is. Poverty of soil and frost damage are the two great drawbacks to profitable agriculture and horticulture in Florida. Yet there are those who succeed in the face of these facts but there are many more who fail. The latter have located unwisely or failed to adjust themselves to the conditions met. Some have been misled by interested locators and are not to be blamed, while others have been blind to plain facts and must suffer accordingly.

Astonishing Assertions.

There has just been sent to me a flaming, colored, whole page advertisement of a Chicago concern that is booming a large tract in the Suwanee section. In it are some most astonishing assertions about "the marvelous richness and fertility of Florida soil;" that the future history of this place "is going to read like a tale from the Arabian nights;" that farmers "grow three crops a year from the same soil," and more gush of the same sort. There is more of mis-

leading or warped statements than of real truth on the entire page. From what I have seen I do not believe there is any "marvelously rich" soil anywhere in Florida. There is some that is fairly fertile and I own a small tract that may be called such and I have investigated it. It is in the famous Anuctalaga hammock in Hernando county, and that is said to be the largest body of really good land in the state, comprising some 60,000 acres. It is densely covered with oak, ash, elm, hickory and other hard woods and no pine whatever, and the most of it is high land on which water does not stand at any time of year. It is about to be cleared and settled, having long been held by timber speculators and kept from improvement. But I do not say it is "marvelously rich," like the alluvial lands of some of our great rivers and their tributaries.



BURBANK JAPAN PLUMS AS GROWN BY A. A. HALLADAY IN VERMONT.

As I was recently at Tampa attending the American Pomological Society meeting I was besought by some young friends who had bought land sight unseen in Manatee county, which is south of Tampa Bay, to go there and see what it really is. This I did. It was sold to them by a Chicago land shark with present headquarters at Sarasota. I hunted him up and asked him about the land. He told me it was good and suitable for homes and citrus orchards. As two of these people were special friends of mine I was especially anxious to get at the real facts and went to a local land owner and fruit grower whom I had known for many years, and who is a most worthy man and well posted judge of Florida lands. He took me to these tracts in his auto and we made a careful examination of the whole situation. These tracts lie between Aneco and Sarasota, in what is known all over Florida as the "flat piney woods." One tract was above the average in quality, for that section, being a little higher than most of the region but almost surrounded by low swales and summer ponds. There was not a house in sight except a turpentine still. No one could make a living off such land. It was not fit for citrus fruits or anything else worth growing. There could be no neighbors, except frogs during the wet season, when they would swarm all about in the woods and ponds. The other two tracts were far worse and so low that I could not see even a building site on either of them. They were not worth the taxes on them. An impervious stratum of hardpan underlies that whole section. The speculator told me he had paid \$10 per acre for a large tract there and had sold these small ones from it at \$50 per acre. And these tracts had been sold to be lived upon by educated and refined people of moderate means, who were foolish enough to take the word of the land shark. What can they do now but lose all they have paid?

Last fall I was asked about the Everglade lands, their drainage, etc., and re-

plied in my editorial notes in this paper. One of the Everglade land boomers, with headquarters at Kansas City, Mo., challenged my views and asked some questions. These I answered and have heard no more since. But the game is going on no doubt and the suckers are still biting. I know of an office in Washington, D. C., of a set of these Everglade sharpeners, where the black Everglade muck is shown in the windows and photographs of bearing citrus orchards and truck farms that are on lands within sight of the Everglades but not on them. These are both misleading. The muck is almost entirely devoid of potash and phosphorus, two of the indispensable elements of plant food. It is not a balanced soil in earthy matter or fertility. And it is underlaid by either clear sand, limestone or marl. The latter is the better of the three, but none of these subsoils are what they should be, nor is the soil what it should be. The pictures show what is done on land that is not far distant from this black muck and yet it is far from being the same kind of soil. I have been on these lands and know by years of observation and some experience what will and will not succeed on them for one part of our land extends onto the edge of the Everglades. The drainage problem is a tremendous one but as yet unsolved. I believe that there will be some of the Everglade lands relieved of surplus water that will

more likely to be injured than orchard crops when in bloom. I have seen this most clearly depicted in Florida on mango, avocado and other tropical trees, the lower leaves being frosted for about two feet and those above entirely unhurt. Strawberries are often hurt when in bloom and peaches close by them are sometimes uninjured by the same frost.

There is another factor that often has much to do with frost injury. There is radiation of heat from the ground and where there is mulching the radiation is very much obstructed and frost will settle in such places more than where the ground is bare. And freshly plowed ground will obstruct radiation of heat, and in orchards or anywhere frost injury is worse under such conditions than where the ground is more solid.

What Kind of Crude Oil to Burn?

Dear Sir: Will ordinary quart tin fruit cans, that have held canned fruit, answer as firepots in an emergency?

Reply: It is possible that old tin cans might have rag or rope wicks put in them and serve to burn oil as orchard heaters but I have never seen it tested. I do not think this would be very practicable but it might serve a good purpose in an emergency. It would be easy to try it. Crude oil that has had the gasoline extracted can be bought cheaply and is the best grade of oil to use for any orchard heating purpose.

Late Spring Frosts East and West.

Prof. H. E. Van Deman: Is there not far more danger of late spring frost injuring orchards in the west than in the east, especially along the shores of the great lakes?

Reply: There is no doubt of the influence that the Great Lakes have over the climate next their shores, especially to the south and east. Some of the best and surest orchard regions in the country lie next to the eastern and southern shores of these lakes. The warmth of the water keeps the temperature mild late into the fall and its coldness holds back the fruit buds from coming out early in springtime, thus preventing injury to the bloom in the spring and giving a warm fall for the ripening fruit. Some of the most uncertain fruit regions are in the interior (middle) states, where the climatic changes are very sudden. The far west is not nearly so subject to changes and spring frosts.

Planting Trees One Year Old.

Do you favor planting one year old apple and other fruit trees in place of older trees?

Reply: As a rule the younger trees of any kind are the more easily and safely transplanted. I have planted apple trees of many ages and those that were but one year old have been more uniformly successful than those of any other age. There is more length of roots, proportionately, than in older ones and the shock to them from transplanting is less. It is the common custom on the Pacific coast to plant yearlings almost entirely and the growers like the plan or they would not follow it.

Pecans in New York State.

You say that the pecan will not succeed in New York state, but since

A FOOD STORY

Makes a Woman of 70 "One in 10,000."

The widow of one of Ohio's most distinguished newspaper editors and a famous leader in politics in his day, says she is 70 years old and a "stronger woman than you will find in ten thousand," and she credits her fine physical condition to the use of Grape-Nuts.

"Many years ago I had a terrible fall which permanently injured my stomach. For years I lived on a preparation of corn starch and milk, but it grew so repugnant to me that I had to give it up. Then I tried, one after another, a dozen different kinds of cereals, but the process of digestion gave me great pain."

"It was not until I began to use Grape-Nuts food three years ago that I found relief. It has proved, with the dear Lord's blessing, a great boon to me. It brought me health and vigor such as I never expected to again enjoy, and in gratitude I never fail to sound its praises." Name given by Postum Co., Battle Creek, Mich.

"There's a Reason." Look for it in the little book, "The Road to Wellville," to be found in pkgs.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

Answers to Inquiries.

Heating Strawberry Plantations to Prevent Injury from Spring Frosts.

Will not strawberry patches require more heat from firepots than orchards, the foliage of which retards escape of heat?

Reply: There is more danger of frost injury near the ground than even a little distance above it and things that grow very low, like the strawberry, are

the Persian walnut will, why not the pecan?

Reply: The pecan is out of its proper climate in New York and other similar regions and that is why it does not succeed there. There are climatic limitations to many things that grow. Because one species of the hickory, that is the Shellbark, is native there and there are others that are hardy there, too, it does not follow that all the species of the genus *Hickoria* are suitable in New York. It is just possible that some valuable varieties of the extreme northern types of the pecan may be found or developed that will prove hardy enough and ripen their nuts early enough to suit that climate, but at this date I know of none such. The walnuts are harder and do not take so long a season to mature as the pecan.

Plum Bark Cracked.

Editor of Green's Fruit Grower: I have some plum trees, that have been bearing three or four years, on which the bark of the trunk and larger limbs have cracked open and a large amount of gum comes out. In some places these cracks are several inches long. Also large quantities of gum run from trunks of my peach trees, though the bark does not crack. I cannot find any borers in these trees. What do you think is the cause, and the remedy for same?—R. W., Ohio.

Reply: There might be several causes for the trouble mentioned but it is likely from violent climatic changes. There may be another cause, such as some kind of blight or bacterial disease and I would suggest that samples of the diseased trunks be sent to the state experiment station at Wooster for examination by the experts there.

Selfmaking Lime Sulphur Formula.

H. E. Van Deman: Please give me the formula for making the home-made lime and sulphur spray that you spoke of at the meeting of the horticulturist society at Roanoke, Va.—J. H. Prillaman, Va.

Reply: The self-boiled lime sulphur wash is made from eight pounds of good stone lime and eight pounds of powdered sulphur. Put the sulphur through a sieve to reduce all the lumps, then mix into it water enough to make a pasty mass which is to be used in making the mixture later. Put the lime in a fifty-gallon barrel and dash on a little water to start it to slaking, and as soon as it begins to get hot put the sulphur on top of the lime and add a little more water. Cover the top of the barrel with an old carpet or some such thing to keep in the steam. Pour on more water and stir with a shovel or some such thing every minute or so, adding more and more water gradually until all the lime is slaked and the sulphur cooked into the mixture. Then finish filling the barrel with water and the mixture is ready for use at any time. This spray will not hurt the foliage of peach or any other trees and will kill the spores of peach rot or almost any other fungus.

Why Use Arsenate of Lead Instead of Paris Green?

Please reply to the above question. Which is the cheaper, arsenate of lead or paris green? Is arsenate of lead more easily dissolved in water? I know that paris green is difficult to dissolve in water. Is there any difference in the adhesiveness of the two above poisons to the foliage? Is there any difference in the possible injury of the above two poisons?—A. H. Hull, N. Y.

Reply: Paris green is never dissolved in water but only mechanically mixed with it and held in suspension. Arsenate of lead does dissolve in water and the particles of the arsenical compound are very finely divided and much more completely cover the surfaces to be coated with the poison than is possible with paris green. The arsenate of lead sticks better and does not injure the foliage so easily. In the end it is the cheaper and better insecticide.

Mr. C. A. Green: Will Prof. H. E. Van Deman give, in Green's Fruit Grower, the reasons for not planting peach trees as fillers in apple orchards? Also does the peach tree retard the growth of the apple?—H. W. Zuse, Md.

Reply: There are several reasons against planting peach trees as fillers in an apple orchard. They are stronger and faster growers than apple trees for the first few years, and usually overgrow the apple trees to some extent. This may not be noticed or realized at first, but if the trouble will be taken to dig into the soil when the roots are feeding the peach roots will be found farther from the base of the trees than those of the apple trees. And secondly,

the two kinds of trees do not require the same amount and kind of tillage and spraying. The most convincing argument against this double manner of orcharding is the actual trial. I have had it in my own experience and have seen it in many cases all over the country, and usually with the results that brought an adverse opinion to planting peach trees among apple trees.

Why is it that currants and other small fruits, such as strawberries, raspberries and blackberries sell better than in past years and at advancing prices?—G. B. D., N. Y.

Reply: It must be that people are eating more berries. That they are learning more of their deliciousness and true value. City population is increasing and there are more mouths to feed each year, for these non-producers must be fed from the country. Berries do not grow in shops and stores. The thing to do is to grow good berries and send them to market in full measure, honestly graded alike from top to bottom.

Is there any better location for an apple orchard or peach orchard than along the Lake Ontario shore in western New York?—Reader, N. Y.

Reply: In all my travels through the leading regions where fruit is grown, from ocean to ocean and from Canada

Grafting Wax.

The component parts of grafting wax are resin, tallow and beeswax. Sometimes linseed oil is used. Mutton tallow is to be preferred to beef tallow, because it is softer. The proportions are as follows, says the "Pacific Homestead": Resin, four pounds; beeswax, one pound; tallow, one pound.

First melt the resin, then add the other ingredients. Melt and mix thoroughly. This makes a soft, pliable wax, which will keep for years. If the weather is cold when it is taken into the orchard for use keep it in a dish of warm or hot water. Or it may be kept in a small dish with a lamp underneath. If it is desired to have the wax a little softer add a trifle more of beeswax or a little less resin.

For harder wax, reverse the process, using more resin. If more convenient, linseed oil may be used instead of tallow, but the proportions would be a little different. It is easy to melt and test, adding ingredients as you want the wax softer, or harder. The above will be found about right to spread easily over the wounds, and yet firm enough to stay without melting and running off when the sun gets hot.

Wagner Apple.

We consider the Wagner one of our good commercial apples because it



This picture shows the residence and a part of the greenhouses and buildings at Mapledell fruit farm. It also shows the cherry orchard and the stairs leading down to the main highway. These buildings were built by the present owner eighteen years ago on practically wild uncleared land. The tall tree near the summer house is a Carolina poplar, set in 1903, and is now nearly eighteen inches at the base. This, like most of the trees at Mapledell farm, came from Green's Nurseries.—A. A. Halladay, Vermont.

to the Gulf of Mexico, I have not seen any place, all things considered, that is better for growing apples and peaches of good quality to greater net profit than along the southern shores of lakes Ontario and Erie. I have seen higher color, better grading and packing and closer attention to the details of the fruit business than is the rule in the region mentioned, but in the matter of natural advantages, including soil, climate, and nearness to market, it is not excelled.

For the average planter which will pay best, large or small fruits?—Subscriber, Pa.

Reply: It would be mere guesswork to give an opinion on this point and I do not think it would be of any material benefit if we did know positively. It would require a tedious and accurate census of the whole business to determine the facts. Both these branches of fruit growing pay well when properly followed in the right sections. The main question is, or should be, how shall we attain the highest state of perfection possible in the business? Both branches should be followed to some extent and that one pushed hardest that pays the best.

H. E. Van Deman.

McIntosh Red Apple.

A "Rural Life" reader asks for information in regard to the origin of the McIntosh Red apple. According to Professor John Craig, this variety originated along the upper St. Lawrence river, and its distribution was commenced by the introducer, Mr. McIntosh, on whose farm it appeared as a chance seedling, in 1870. The tree is hardy and vigorous, and a moderately early and practically annual bearer, and succeeds over a wide range of territory. It is at home in northern New York, and succeeds well in cold, elevated regions.

Professor Craig says that at the National apple show in Spokane, in 1908, a carload of this variety was exhibited by a Bitter Root valley orchard company of Montana, grown at an elevation of some 3000 feet and in a location where the thermometer occasionally touches 40 degrees below zero.

"Why do you persist in putting water in your milk?"

"But do you know of anything cheaper, sir?" the milkman asked.—Ex

"Ol' Nutmeg's" Sayings.

Written for Green's Fruit Grower by Joe Cone.

April.

I like to watch the April skies. They are so like a maiden's eyes; They may grow dark with springtime rain.

But soon they are all smiles again.

A hen never scratches fur ideas.

A pull is no good without push.

Do right, but not right an' left.

Unfortunately some people are honest simply becuz it pays.

Stolen fruits may be the sweetest, but they spile quicker.

Some peoples' idee uv a good time is a bad aftermath.

It is purty expensive bizniz when the devil is to pay.

Many a man complains uv his lot who ain't got one.

Go back to the farm, but never go back on the farm.

Some people won't allow anybody to tread on their toes 'ceptin' the devil.

Ef things ain't what they seem it may be becuz you ain't yourself.

Ev'rything comes to him who waits, even the baseball season.

Cream is bound to rise to the top. Be ez creamy ez you kin.

Busy people hev all they kin 'tend to with their own affairs; git busy.

Becuz the good die young ain't no excuse fur you to be ol' an' wicked.

Let the boy whistle; you mos' gen'ly know where he is when he is whistlin'.

A rollin' stun may not gather any moss, but it is apt to gather momentum.

Be good an' you'll be lonesome, but by bein' lonesome you'll be in purty good company.

Lightnin' never strikes twice in the same place, but a hornet ain't no relation to lightnin'.

No man is so poor but thet he kin afford to pay a complermunt now an' then.

A farmer should not on'y keep himself posted, but should keep his fences in the same condition.

Someone hez writ: "What is home without a mother?" We rise to remark thet they ain't no sech thing.

The of'ner a young man goes to the barber shop thetter his chances uv hev'ing a stiff upper lip.

The feller who says too much about his own honesty is in danger ov believin' it ef he talks about it too long.

When a girl admits thet she thinks more uv you than anybody else in the world she either does or else she doesn't.

EDITOR BROWNE

Of the Rockford Morning Star.

"About seven years ago I ceased drinking coffee to give your Postum a trial.

"I had suffered acutely from various forms of indigestion and my stomach had become so disordered as to repel almost every sort of substantial food. My general health was bad. At close intervals I would suffer severe attacks which confined me in bed for a week or more. Soon after changing from coffee to Postum the indigestion abated, and in a short time ceased entirely. I have continued the daily use of your excellent Food Drink and assure you most cordially that I am indebted to you for the relief it has brought me.

"Wishing you a continued success, I am Yours very truly,

J. Stanley Browne, Managing Editor."

Of course, when a man's health shows he can stand coffee without trouble, let him drink it, but most highly organized brain-workers simply cannot.

The drugs natural to the coffee berry affect the stomach and other organs and thence to the complex nervous system, throwing it out of balance and producing disorders in various parts of the body. Keep up this daily poisoning and serious disease generally supervenes. So when man or woman finds that coffee is a smooth but deadly enemy and health is of any value at all, there is but one road—quit.

It is easy to find out if coffee be the cause of the troubles, for if left off 10 days and Postum be used in its place and the sick and diseased conditions begin to disappear, the proof is unanswerable.

Postum is not good if made by short boiling. It must be boiled full 15 minutes after boiling begins, when the crisp flavor and the food elements are brought out of the grains and the beverage is ready to fulfill its mission of palatable comfort and renewing the cells and nerve centres broken down by coffee.

"There's a Reason."

Get the little book, "The Road to Wellville," in pkgs.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.



SMALL FRUIT DEPARTMENT

Currants for Market and the Home Garden.

Our time has been well occupied for many days past pruning the bushes that will bear fruit this year, and we are pleased to be able to say that the plants never looked more promising. They seem to be in splendid condition, and a large crop of fruit is almost a certainty.

We are at this writing preparing to spray every tree, plant, bush and vine on our grounds, and the currant bushes will certainly be attended to with extra care. They will be sprayed again just as the buds are breaking through.



Currants are about the cheapest and easiest crop of fruit to produce, requiring very little time and labor as compared with many others. For fillers, or what might be termed a catch crop, they are indispensable, when grown between plum, pear, peach, cherry and quince trees. They can be grown in an orchard of any of these fruits without retarding or injuring the trees. When currants are fruited in this way it is merely a question of more manure or fertilizer. Every intelligent fruit grower will understand this at once. Under this system of intensive gardening you have a nice income from your currants, while your fruit trees are developing and getting ready for fruiting.

It depends entirely upon yourself as to how long these bushes will bear large, marketable fruit.

No matter how great a sacrifice it may seem, you should remove two-thirds of the new wood each season. Failing to do this, you will soon have a lot of overgrown bushes on your hands, and the fruit will soon dwindle in size and be imperfect in many ways. On the other hand, if you prune judiciously, spray as often as is necessary, manure well, and cultivate thoroughly you can keep your plantation of currants in perfect order for at least ten years, and one year with another, you will be well recompensed for your investment and labor.

Strawberries as a Money Crop.

Written for Green's Fruit Grower by Ida E. Griffin (Chaut. Co., N. Y.).

The story I am about to relate is a true, actual experience of a worthy aged and feeble couple and their only daughter, who had to leave their home near Gettysburg, Pa., as that most famous battle was fought on the place they owned, and everything they had was destroyed. I have often heard them relate how they stayed long after others had gone, thinking to save the place and buildings as everything else had been taken. But they were ordered away and the buildings shot to pieces and afterwards burned. They came to Chautauqua county with nothing but the clothes on their backs, bought a

small farm and a big mortgage for the size and condition of the place. But thanks to the strawberry, which they were able to raise and if they could not do all the work the kind neighbors sometimes helped without hire or pay only some berries to eat and the gratitude of the good people.

As a failure of the crop meant ruin to them, it was the money crop to pay interest, taxes and other expenses, and with it they lived very comfortable.

Our experience with berries and small fruit is there is more money from the labor and ground if well tended and marketed than anything else and farmers could with a little more energy raise their fruit and have a plenty for home use and to spare if they only would.

Strawberries for Profit.

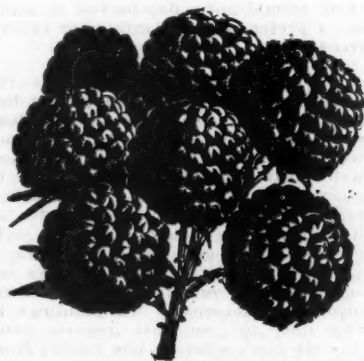
Written for Green's Fruit Grower by John Edwin Taylor, Maine.

Strawberries are the most profitable product that can be raised on a farm. This is especially true for the small farmer or one who may have a few acres to cultivate. The plants are easy to care for and with a very little experience the profit is sure.

A short time ago in central Maine a man died leaving his wife and a family of three small boys. The only thing that the man left behind him to his wife was a small house and ten acres of land in the village. The man had, however, before his death set out a quarter of an acre of strawberry plants. It was the beginning of spring when the woman took up the sole support of her family. The plants had been set since the June before. They would be ready to bear that summer in July. Knowing the method that had been used by her husband in setting out the plants, she got her ground ready and set out one-half acre of strawberries during that May and June. She and her boys together did all of the work excepting the plowing and harrowing. The oldest boy was fourteen and the youngest was seven.

The last part of June the woman with her three children began picking the strawberries from the old bed. It kept them picking every other day for over three weeks and, with a team, the oldest boy peddled them out in a village of 5000 inhabitants, receiving on an average fifteen cents a box. From that piece of strawberries and with a little other farming that the woman and her boys did that summer and fall she was able to keep her boys in school. The following year from the one-half acre that she and her boys had set out she got \$488. On being asked how she managed to take care of the strawberries and do so well with them, she said that she had kept busy with the cultivator.

Many look upon strawberry raising as being a difficult task, back-aching to say the least, but it isn't so. Strawberry plants should be set in rows about four feet apart and the plants perhaps a little more than a foot apart. After the plants have been well set and the dirt has become settled around them, a fine toothed cultivator should be run between the rows. This should be done at least once a week until the fall frosts begin to come. The runners should each time be placed to run lengthwise of the rows and if one, after cultivating, will each time go through the rows with a hoe, he will have no difficulty in keeping the weeds out. A strawberry bed should be used only one season; but new beds should be set out each spring, the plants of the new bed being taken from the bed that is to bear that year. Care should be used in selecting the plants, to select three rows of staminate to one row of pistillate. This is necessary because one plant alone is imperfect.



Culture of Raspberries.

Raspberries prefer a deep loam that is rather moist than dry, thereby keeping the roots cool. All the manure that can be worked into the soil to advantage before planting should be used. It should not be coarse as such will not mingle with the soil properly. After the ground has been thoroughly prepared by plowing and reploting, harrow it

smooth, mark it off in rows five feet apart each way, thus enabling horse-cultivation to be done both ways. A block planted in this way is easier and more economically worked than the row or hedge system. Perhaps more berries can be produced by the latter, but the fruit will not be so fine, and the fine fruit always brings the best prices.

All that is necessary the first year is to keep the ground loose and the weeds down, by continued deep cultivation, which is easily done by going through the rows both ways once a week or oftener, if necessary, with the cultivator. This will help to keep the ground moist, too—a point very important in a dry season. Pull out all weeds from the hills that the cultivator does not reach. "Clean, thorough cultivation," is the motto of the successful gardener, and the best results are not attained without it.

In the fall select five or six of the best canes in each hill for next season's fruit, pulling out all others. Take these canes, one hill in each hand, bend them down carefully toward each other to the ground, and hold them there while the assistant puts a shovel or two of earth on them to keep them down permanently. Five feet apart may seem too great a distance for such treatment, but where they have had proper culture no difficulty will be experienced in this point.



STRAWBERRY PICKING TIME AT JOHN EDWIN TAYLOR'S PLANTATION, (MAINE.)

Strawberry Experience.

Not long ago, a New York friend decided to engage in strawberry growing. He knew nothing about the work, but after discussing the situation with well known plant growers, who gave him detailed information as to how to proceed, he decided to make the plunge, and he set out an entire acre of plants, says "Farm World." His astonishment and pleasure at the result may be understood from this quotation from a letter written at the close of his growing season: "I have sold my fruit for \$888.17, and I know that fully \$100 worth more was consumed by the two families interested, and by the host of friends who came out to enjoy with us our splendid crop of fruit."

This latter instance suggests how very simple the growing of strawberries is, if one but uses plain common sense. There is no mystery about it; there is no waving of a magic wand and by saying "Presto, change!" work a miracle. It is simply taking the resources of Mother Nature which lie at the hand of all, and using them in just the very same way that they have been used in all the centuries of time; and there you have the results you have set out to secure.

We repeat that no other line of work compares with the growing of strawberries, in the amount of pleasure and profit that may be secured from it. There is no other line of work which can be entered upon with so little original outlay of cash. There is no other line of horticulture upon which such generous returns may be secured in so short a period of time.

Set out your plants in April or May of 1911, and in June and July of 1912 you will be harvesting a splendid crop, which all the world is glad to pay for generously. And then there is the moral value in doing for yourself that cannot be too highly estimated; and to this is to be added the physical value that results in coming into close contact with Mother Earth, and the fine exercise of body and mind which this work involves.

Every one who has a rood of ground should have a strawberry patch. It should become, indeed, the fruit universal.

Works Both Ways.—"He knows all the best people in town."

"Why doesn't he associate with them, then?"

"They know him."—Cleveland "Leader."

WHITEWASH RECIPES.

The Following Are Good Ones, but Cost Some Labor.

Take half a bushel of unslaked lime, slake it with boiling water, cover during the process to keep in steam, strain the liquid through a fine sieve or strainer, and add to it a peck of salt previously dissolved in warm water, three pounds of ground rice boiled to a thin paste and stirred in while hot, half a pound of powdered glue previously dissolved by soaking in cold water and then hanging over a slow fire in a small pot hung within a larger one filled with water. Add five gallons hot water to the mixture, stir well and let it stand a few days, covered from dirt. It should be applied hot, for which purpose it can be kept in a kettle or a portable furnace. Coloring matter may be added as desired. For cream color, add 'yellow ochre'; pearl or lead, add lamp or ivory black; fawn, add proportionately four pounds of umber to one pound Indian red and a pound of common lamp-black; common stone color, add proportionately four pounds raw umber to two pounds of lampblack.

For interior work: Slake a peck of lime till it is thick and creamy. While it is hot mix with a pint of linseed oil and one-quarter pound of glue previously dissolved in water. Let the mixture

stand several hours before applying it. A little lampblack dissolved in vinegar and mixed with whitewash gives a grayish tint, which may be preferable to pure white; a little umber gives a fawn color, and yellow a cream tint. Very little coloring matter should be used or the shade will be too dark. If this is made somewhat thinner than indicated above and strained through a flannel cloth it may rapidly be applied with a sprayer such as is used in spraying trees. When strained through cotton cloth the lint from the cotton often interferes with the work.

Pruning the Blackberry.

I have added to my blackberry plantation from year to year until I now have about two acres. What troubles me is the annual pinching back of the canes. I follow the directions to pinch back when the canes are from eighteen inches to two feet in height. But after this the canes get up ten feet high in parts of the patch with laterals running from row to row. Should the laterals be cut back, and should the extra canes be thinned out?

It is now the practice in the extensive plantations of systematic growers, to pinch back the canes when not more than ten inches in height. This gives an upward growth to the laterals which become strong bearing branches. All surplus canes are removed with the pruning knife and all suckers coming up out of place are treated as weeds. In the spring the bearing wood is cut back, more or less depending on its growth. Where the vines are laid down much of their surplus growth is removed before the covering is done. Many, too, now are planting the Snyder for the reason, mainly, that it is so rampant in growth.

No Strawberries Near Potatoes.—Miss Genung discussed principally the growing and marketing of strawberries. She said that a very important fact that is overlooked by many strawberry growers is that potatoes attract white bugs that work great havoc among strawberries, once they locate the plants, and that for that reason the strawberry grower must be exceedingly careful about growing the tubers near the strawberry patch.

"And you give the giraffe only one lump of sugar?" asked the little boy at the zoo.

"Oh, yes," replied the keeper; "one lump goes a long ways with him."

A New England Fruit and Poultry Plant.

Written for Green's Fruit Grower by
A. G. Symonds, N. H.

One of the largest poultry farms in America is located in Hancock, New Hampshire. It embraces over a thousand acres of rough, rocky, uneven but fertile land. Upon it there are over seven hundred poultry houses and eight thousand hens. One cannot fully appreciate the magnitude of this ranch until he has inspected it. Besides the giant poultry plant there are ten thousand apple trees upon this farm.

The poultry houses are A in shape, wind and storm proof on all sides save one which is open and faces the south. This open front is covered with inch mesh wire netting in which hangs a door covered with the same material eighteen inches in front and the door frame in the center. An iron drinking receptacle is fastened on the outside and the hens put their heads out through an aperture. Each house has a tight floor, two roosts, two nest boxes, self feeding hopper for grit, cracked bone, charcoal, etc., a box covered with two inch mesh wire netting in which the dry mash is fed.

The houses are approximately six feet in height, six feet wide and eight feet long. The roof and back are shingled. They are built on substantial sills so that they may be moved on wheels or sleds. They are twenty feet apart arranged in rows, thirty feet intervening between the rows.

The capacity of each house is twelve hens. Pullets are purchased every fall from farmers in Vermont, New Hampshire and Canada to fill these houses and the yearling hens are sent to Boston and sold live weight during the Jewish holidays when the best price is procured. From the time the pullets are put into these houses until they are shipped away as poultry they are never let out summer or winter.

The houses are cleaned twice yearly, in the spring and in the fall, and the fertilizer is spread around the apple trees.

The pullets are fed twice a day, in the morning a dry mash of the following ingredients:

Four parts mixed feed, three parts corn meal, two parts beef scraps, two parts clover or alfalfa, two parts meat or animal meal, one part stock feed. At night, cracked corn is fed. Wheat is sometimes substituted for the corn. Grit, oyster shells, cracked bone, and charcoal are always kept by them. Water is provided them until snow comes, then a little snow is given them.

The hens lay well and the eggs are shipped to Lowell where they command the market price. This style of house and method of caring for hens, evidences of farmers copying this method are to be found for many miles around Hancock. No bad results have been observed by keeping the hens in the open front houses. Instead they stand the climate remarkably and lay well during the cold months.

Five men are employed to carry on the plant. During the apple picking season sixty men are hired to harvest the crop which amounts to 6000 to 10,000 barrels annually. These men are divided into three gangs and the work goes on with the precision of clock work. Four hundred barrels are daily shipped away, the product going to England and netting the owner \$3.00 per barrel in 1910. The barrels are made in a cooper's shop on the farm and several two horse teams are kept busy hauling the apples to the station.

Have you any conception of a thousand apple trees? Can you imagine a single orchard of 2000 trees all laden with its ruby fruit? But on this farm there are 10,000 apple trees. Twenty-five years ago when this plant was started there were between 700 and 800 apple trees. To-day the best orchards are twenty years old and they range in age down to two or three years old.

The land is rough, rocky, and uneven. On the thousand acres it slopes to every point of the compass, but it is all good black loam, strong and productive soil, just right for apple culture. The hardpan sub-soil holds the moisture well and the orchards never suffer from droughts. Twice the trees are sprayed and the almost perfect fruit is ample proof of the wisdom of spraying.

The trees are vigorous, the bark and limbs showing good growth, the foliage luxuriant and dark green, the fruit of good size, hard but juicy, and well colored; all this the result of the ideal soil and the ideal fertilizer.

There are thousands of trees that have not reached the bearing age. Many of these are growing in slashes or brush land. The trees are hidden from view in a lot of the sprout land, but when the trees near the bearing age the growth is cleared away and burned. A good deal of the land it is impossible to

plow and the trees are simply mulched and the dressing from the poultry houses spread around the roots of these trees.

This plant has been successful from its inception and the average annual income now amounts to over \$20,000. It is a novel plant, there is none like it anywhere else on the globe. It is a living testimony that poultry keeping can be carried on successfully on a large scale and that fruit and poultry are profitable combinations.



Growing Gooseberries.

The gooseberry is a neglected fruit. The market is rarely over-supplied with this fruit, and a reason for this is that it can be gathered and marketed through a long season instead of all having to be harvested and sold at one time. The green berries sell readily almost as soon as they are large enough to be picked and bring then the best prices of the season, but this is equalized by the fact that later on they are much larger and a bush will then yield more quarts.

A gooseberry bush at two years from planting should yield three quarts of fruit, and after that five quarts a season. An average retail price is about ten cents a quart. The crop is almost a certain one, for if the worms are kept off, which may be easily done by the use of hellebore, the only other enemy which they have to fear is mildew. Our native varieties are much subject to that. The plants should be set on cool, moist soil, and a partial shade does not injure them. Close pruning will increase their productiveness and tend toward making them longer lived. The fruit is the very earliest of any we may have from our home gardens, and if for this reason only should be much more widely grown than it is.

Effects of Lime-Sulphur on Apple Trees.

The great question among fruit growers everywhere is: Shall bordeaux be replaced by the lime-sulphur as a summer spray? Mr. Everett Wallace, the lime-sulphur expert of the New York station, who has conducted many interesting experiments along this line, announces that his observations indicate that heavy drenching is a common cause of injury to foliage, says "Farm World."

He says that much of the injury by the burning of apple foliage last summer, following the application, just after the blossoms fell, was due to previous scab-infection of the leaves.

He has found that arsenate of lead is the only insecticide known which may be used in the lime-sulphur with safety. It not only decreases the burning but actually increases fungicidal value of the mixture by 50 per cent.

Injury to both fruit and foliage by the lime-sulphur is much less serious than that caused by bordeaux under the same conditions, and the addition of lime or the presence of sediment does not materially affect the burning qualities of the lime-sulphur one way or the other.

Another important point found is that cultivated trees will withstand foliage injury much better than neglected orchards.

What an Acre of Land Will Produce.

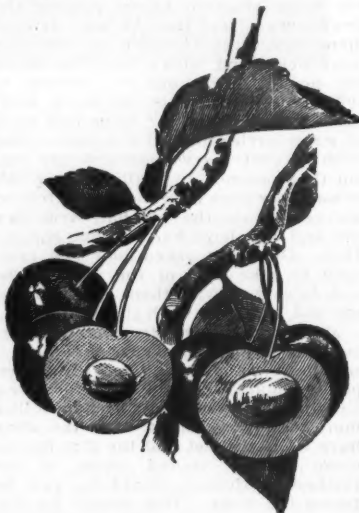
An acre of land under such cultivation as the average farmer can give may, says O. J. Maguire, in "Farm Stock and Home," be made to produce two hundred bushels of potatoes, twelve tons of carrots, or twenty tons of cabbage. At the prices paid one year with another, the acre of potatoes would bring \$100; the acre of carrots at 50 cents per bushel would bring \$214, and the acre of cabbage at 50 cents per 100 pounds, would bring \$200. Four acres devoted to the above crops would bring the farmer \$647. This is figuring on paper, but farmers have been known to do even better than this.

Montmorency Hardy Cherry.

There are two varieties of hardy cherries that succeed over a wide extent of country. One of these is the Early Richmond. The "American Agriculturist" has said that if only one cherry tree is to be planted, that it should be an Early Richmond. It is a well known and popular old variety that has been a stand by for so many years. It is an abundant bearer and the trees are vigorous and healthy. The other variety is the Montmorency, which is larger in fruit and later in ripening. Montmorency is the most popular of all the hardy cherries. It is light red in color; the trees are remarkably productive. The fruit sells for nearly double the price of ordinary red cherries at the canning factories. Those who have not succeeded well with the sweet cherries, black or white on account of their rotting after warm summer showers or on account of winter killing, should plant the Early Richmond or the Montmorency, which I am sure they will succeed with.

Cherry Tree Notes.

Cherries.—One reason farmers and fruit growers do not grow more cherries is that they are usually planted along fence rows and in other undesirable locations, where they are allowed to take care of themselves. Under such conditions the trees make a poor growth and bear a crop of cherries every three or four years and are called a failure. If we would plant and care for a cherry orchard as we do our apple orchards it would not be long until we would begin to realize the importance of the cherry not only as a desirable fruit for family use, but also as a marketable fruit. I do not advise the planting of many varieties of cherries. First I would plant the Early Richmond for an early crop. I would also plant the English Morello and Dyehouse. The Montmorency also does fairly well here, and is almost as popular as the Early Richmond. It is a very popular variety for canning purposes.



Cherry trees should be cut back the same as other trees when planted. They will not start quite so readily as apple or pear trees and shortening in their branches decreases evaporation correspondingly. If the roots are poor it is well to cut the tops back more than if they are strong; but it is likely that the tops and roots will be of corresponding size in any case. The pruning should be done the day the trees are planted, no matter what time of year it is; and those set in the fall are especially in need of this treatment, because of the evaporating influence of the severe cold of winter. If this has not been done there should not a day be lost in doing it. I prefer spring planting for cherry trees.

Hardy Cherry.—The specimens received are of the Morello type. It has been proven to be one if not the best of late cherries to be planted and from wherever reports are made it is doing well, clear from Kansas City north to points in South Dakota. As a money maker it is one of our best varieties, as it comes in at a time after the early cherries are all gone, when the markets are not glutted with this fruit. We are confident that our friend will make no mistake in increasing his plantings in this line, for we have reports from western Iowa where it has yielded from 300 to 500 bushels per acre, on trees ten years old, and even if they only get a crop every other year there is more money in growing this cherry than in any farm crop.—Exchange.

"Were you ever in a railroad disaster?"

"Yes—I once kissed the wrong girl while going through a tunnel."—Toledo "Blade."

Virginia Farms for Orchards.

Mr. Charles A. Green: I have been reading Green's Fruit Grower for many years, also have been reading the articles you have been printing on Virginia apple growing, and would like to learn more about the Virginia fruit belt. If it would not be asking too much of you, would you please give me all information you can about cheap land in that section, also the soil and best location in that state for apples and other fruits? Find enclosed stamped envelope for reply. Thanking you in advance for favor.—C. A. Vessels, O.

Green's Fruit Grower's reply: The Virginia fruit belt comprises two distinct sections. First, the Shenandoah valley lying between the Blue Ridge and the Alleghany mountains, from ten to thirty miles wide and one hundred miles long. Second, the eastern slopes of the Blue Ridge known as the Piedmont section running the breadth of the state. The prevailing soil of the valley is limestone. Red soils prevail in the Piedmont. The advertised cheap lands in the valley are usually the adjacent mountain sides. It will frequently be poor economy to buy this timbered mountain side, at \$10 per acre, as against good farming land on the floor of the valley at \$100 per acre. The Piedmont section, comprising the eastern foot hills of the Blue Ridge has not been so extensively exploited and lands are cheaper. Farms which have areas of good fruit land, less than one hundred miles of Washington, can still be had for about \$60 per acre. At least that was the condition two months ago in one locality with which the writer is familiar. These foot hills make the best stock country east of the plains states. There are two reasons. First, blue grass is indigenous in the northerly part. If a field is left uncultivated for a few years the blue grass grows in of its own accord and runs out all other grasses, and secondly, owing to climate and sheltering hills and mountains on the west and north, very little winter feeding is necessary. The Blue Ridge strikingly illustrates the influence of mountain chains upon the progress of mankind. At some future time, its story, as related to the economic history of apple culture, may be told to the readers of the Fruit Grower. On the westerly side, the range ends rather abruptly and the valley commences. On the east the mountain fades away in a series of foot hills, each one lower than its neighbor. To answer these questions in full, would really require books devoted to the geology and physical geography of Virginia besides a treatise on apple culture.

Cherry Orchards in the West.

Chas. A. Green, Esq.: Fine profits have been made in growing sour cherries in the Arkansas valley in Colorado. Some 10,000 trees are planned to be planted, near Ordway, this spring. A neighbor there with six acres cherry trees, twelve years old, told me they picked \$400 worth per acre last summer. Another neighbor there, with twenty acres in cherries, six years old, plans to plant twenty acres more this spring. He told me recently that he refused \$1000 per acre cash for four acres of his Wragg cherry orchard. I planted 300 cherry trees last spring, although my two Colorado orchards are mostly winter apples. I have sixty acres in bearing, and had \$10,700 crop of apples in 1909 and \$8800 in 1910. Recently I bought two more apple orchards, about 100 acres, in bearing, in Morris county, Kan., so I have now about 10,000 bearing apple trees—enough to keep me busy. We miss father and mother, but plan to move to Oregon later where we will be nearer them.—Geo. H. W., Colorado.

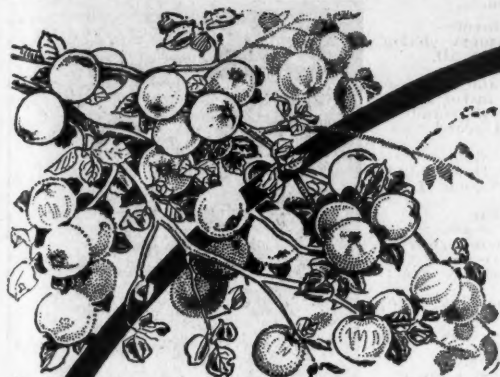
Fertilize the Apple Orchard.

Luckily for the peace of mind of most fruit growers, an apple tree can not squall when it is hungry. If it could there would be more manure hauled out in the orchard than there is now. It is out of the question to expect an orchard to go on raising heavy crops of fruit year after year with no fertilizer to replace what has been taken from the ground. We do not expect other crops to grow without feeding them and why apples? That we do expect it, is the cause of many stunted orchards.—John F. Sellars, N. C.

About Cherries.

Editor of Green's Fruit Grower: Referring to yours of the 30th ult. received in Colonel Brackett's absence, I would say that the Lambert cherry impresses us as a valuable variety. Its usefulness is, of course, greatly increased if it proves as hardy as you think it. It is of brighter color than "Bing," and therefore rather more attractive.

A full stomach gives us a dull mind.

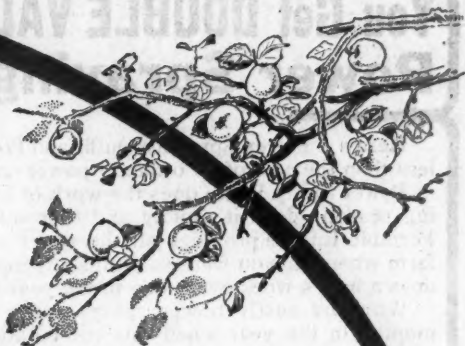


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When Fruit Trees Make Their Growth.

The New Jersey experiment station has made a record of observations to determine at what date fruit trees complete their season's growth, and it was found that in that latitude all trees complete their growth at a comparatively early date. The twig growth of apple and plum was nearly half made by May 18, with comparatively little growth after June 12. The growth of pear twigs was nearly completed by June 26, and the cherry by July 10. The station report adds: "It is suggested from this data that tillage should begin early and cease early to conform with the growth period."

Peach Leaf Curl.

Professor Whetzel, in his address on "Control of Peach Leaf Curl," says that this is one of the easiest diseases to control. Yet there are a lot of failures in its control every year, owing, no doubt, to the failure of doing the right thing at the right time. Leaf curl was quite prevalent in 1910, and Elberta, as always, the most susceptible variety of any. We must spray, and do it thoroughly, even before the buds begin to swell. The spores pass the winter on the limbs of the tree. Then is the time to spray and kill them. When the bud scales spread apart and expose the tender tissues, and rains come, then the spores, if still alive, germinate, and there will be trouble, says "Tribune Farmer."

"Use any old thing for leaf curl," he says. Any standard fungicide—lime-sulphur, copper sulphate, etc.—will do it if applied early enough—i. e., before the buds swell. This is the right time. The next thing is thoroughness of application. Every bud must be coated. The finer the spray and the greater the pressure, the surer you are to prevent leaf curl. It is not advisable to spray in freezing weather. Fall spraying may be effective, but better spray in March, and spray from both sides of the tree. Lime that contains much magnesium oxide will probably control the curl. If copper sulphate is used, it may be made of the strength of two pounds to fifty gallons of water. Even one pound in one hundred gallons may do it. As to the strength of lime-sulphur, Professor Whetzel says it is advisable to use it strong enough to kill the scale—say, one part of the concentrated solution to nine or ten parts of water.

Varieties of Peaches.

In regard to peach varieties for western New York, almost the only one for market, says Jay Allis, is the Elberta, and others are used only to prolong the season. Among these we have Yellow St. John, Niagara, Foster, Carman, Belle of Georgia, and Mountain Rose, but Elberta is the peach to make the profits on. It is a good shipper. Niagara is a fine peach.



ELBERTA PEACHES.

Mr. King holds, to about the same views on these varieties. Ray is a fine white peach, and Carman and Wadell of about the same order. Belle of Georgia is just a little later than the earliest, and earlier than Elberta. Early Crawford is a poor shipper. They rub against one another in the basket and become bruised. Only a few Champions are wanted in an orchard, as there is no good market for these early peaches, and all are poor shippers. Kalamazoo and Fitzgerald are too small. Mr. Allis says if he had to plant two varieties he would select Elberta and Chair's Choice. Reeves's Favorite, however, is a good peach for canning factories. For late varieties, Chair's Choice and Crawford Late are named. In some sections the late Crawford is a shy bearer, but otherwise a good peach.

Results of Culture Compared with No Culture in Orchard.

The average yield on the sod plat for the five years was 72.9 barrels per acre; for the tilled plat, 109.2 barrels; difference in favor of tilled plat, 36.3 barrels. Estimates made at blooming and fruiting times showed a far greater number of fruits on the tilled trees. Actual

count showed 434 apples per barrel on the sod land weighing 5.01 ounces each, and 309 apples per barrel on the tilled plat weighing 7.04 ounces each. The fruit from the sod-mulch plat is much more highly colored than that from the tilled plat. The fruit on the sod-mulch plat matures from one to three weeks earlier than that on the tilled plat. In common storage, fruit from the tilled plat keeps four weeks longer than that from the sod plat. In cold storage, the keeping quality of the two fruits is the same. The tilled fruit is decidedly better in quality, being crisper, more juicy and of better flavor. The advantage of tillage over the sod-mulch in the matter of uniformity of trees and crops is marked. The tree in sod showed abnormalities in foliage, branches, roots and particularly in fruit-bearing and in fruit characters.

The dark, rich green color of the foliage of the tilled trees indicated that the tilled trees were in the best of health. On the other hand the yellow color of the leaves of the sod trees told at once that something was amiss. It needed only a glance in the orchard to see that the leaves of the tilled trees were much larger and much more numerous and that therefore the total leaf area was much greater. During the dormant season there was a striking difference in the appearance of the new wood in the two plats. The new wood on the tilled trees was plumper and brighter in color, indicating better health.

The Arkansas or Black Twig or Mammoth Black Twig Apple.



This is a late keeping winter apple, large size, red in color and good quality. It does not succeed so well in New York state as it does farther west or south. It is a better keeper than Baldwin. It resembles Paragon and Winesap closely. It is thought to be a seedling of Winesap. The tree is a vigorous grower.

The problem of feeding and care is too important to leave to average hired labor.

Advice to Tree Planters.

Latitude Where Trees are Grown.—It makes little difference whether the trees are grown in one section of the country or another, provided they are equally thrifty and healthy. There is no good reason for sending north, or to any other point of the compass for trees, simply for the purpose of securing stock from another latitude than where the trees are to be planted, nor is there anything to be gained in passing by the small home nursery in order to choose from an alluring list of high priced novelties, says horticultural report.

Space Between Trees.—The space to give apple trees in an orchard varies according to the soil and variety. On good soil the strong growing sorts require about forty feet in each direction, at maturity. The spaces between may be occupied for the first ten or twenty years with "fillers."

Apple Trees the Best Fillers in an Apple Orchard.—The best fillers in an apple orchard are apple trees which are upright in habit of growth and begin to bear at an early age. Those of a spreading habit may be used if precocious. The first class is exemplified by the Yellow Transparent and Wagener, which may be planted in the rows, both ways, between the permanent trees. Oldenburg (Duchess) and Wealthy may be used, with some caution, in the same manner. Jonathan, Ben Davis and Gano are suitable to plant in the centers of the squares between the permanent trees.

Safe Rule for Using Fillers.—Peach, and other vigorous growing trees, are unsuited to be used as fillers in an apple orchard, unless confined to the centers of the squares. They ought never to be planted in the rows with the apple trees. The only safe rule in the use of fillers is that nothing shall be employed for the purpose which is more vigorous in growth than the permanent trees, and that the removal of fillers shall be begun as soon as there is evidence of crowding.

Apple trees should be set thirty to forty feet apart each way. Hilly or rocky fields may often be profitably occupied by apple orchards, if the soil is fertile. Even if the soil cannot be plowed a profitable apple orchard may be established by mulching the soil about each tree or stirring it with the spade or pick until the trees become firmly established.

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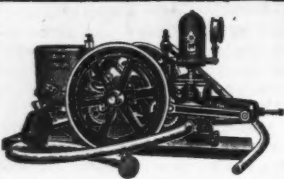
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No Branch Offices NEW YORK

The Apple Orchard.

Of the great beauties of the farm—The one that has the foremost charm The apple orchard leads them all, From early spring to latest fall. The budding trees of pink and white, The whole world shows no fairer sight. An apple tree's full bloom will stand Beyond all rivals, broad and grand.

The honey bees, rejoicing find Its blooming sweetness to their mind. They come from far, they come from near—

The early harvest of the year. At length the baby apples show Amid the green leaves, growing slow; A promise of a tempting treat, Which rain and sunshine kindly greet.

Those red-striped apples, tempting, rare; No golden orange quite so fair. Though tropic trees have long been mine—

For apple orchards still I pine. That orchard to my childhood known, No tropic fruits can half atone. The early bloom—the red-cheeked fruit, Are visions which my dreams salute. —Colman's "Rural World."

Fruit Reports from the Pennsylvania Society.

John D. Herr, of Lancaster, chairman of the fruit committee, presented his report, giving the fruit results of 1910 as gleaned from the information furnished by one hundred correspondents, every county having been represented. Apples yielded 40 per cent. of a full crop, the failure in the western counties, due to the damage caused by late frosts in the spring, having reduced the percentage, reports "Country Gentleman." Pears gave satisfactory returns, the crop having been good in all sections. Considerable loss occurred through blight. There was no material increase in the acreage in pears. The peach crop was one of the heaviest in the history of the state, and the quality of the fruit was unusually good. The prices were lower than in the previous year, and ranged from 50 cents to \$1.25 per basket. Plums did well and the fruit was of fair quality. The average price was \$1.60 per half-bushel basket, or 20 to 30 cents for an eight-pound carrier. Cherries are not much grown, according to 60 per cent. of the correspondents. The most popular varieties in Pennsylvania are—Montmorency, Early Richmond, Dye-house, Napoleon Bigarreau, Black Tartarian, May Duke and Reine Hortense. As to grapes, there is only one section of the state where they are grown to any extent—the northwest, in the district abutting on Lake Erie. The Concord, Niagara, Worden, Salem, Brighton and Moore's Early are the kinds mostly grown. Small fruits are being planted more generally. The leading varieties of strawberries in Pennsylvania are the Haverland, Bubach, Dunlap, Sample, Glen Mary, Brandywine and William Belt. In raspberries, the Gregg, Cumberland, Cuthbert and Kansas lead. In blackberries, the popular kinds are Snyder, Eldorado, Erie, Kittatinny and Mercereau. Sixty per cent. of the replies from correspondents show that the San Jose scale is being kept under control in the state, and all but five replies give lime and sulphur the credit. The codling moth is being kept in subjection by spraying with arsenate of lead, paris green and pyrox. The self-boiled lime and sulphur solution is taking the place of bordeaux. A general awakening to the importance of fruit growing has taken place, and the plantings during the past year were the greatest in the history of the state.

Orchard Notes.

Look for borers if gum exudes from the root of the peach tree. Look for borers in June and October anyway.

The disk is better than the plow in the orchard for breaking up sod.

Never cut a limb from a fruit tree unless you know just why you do it. An orchard neglected for one year virtually puts it back three years.

It is a sad mistake to neglect an orchard when it is not producing a crop of fruit.

Rub off the water sprouts of a tree as soon as they appear. You can do it with your fingers. Whenever a large limb is sawed from the tree the wound should be at once covered with wax or thick paint.

Remember when you plow in the orchard that the roots are very near the surface. Three inches is plenty deep enough.

Give the apple orchard plenty of fertilizer, particularly potash and phosphoric acid. A starved orchard is not a money maker.

More depends upon the right choice of kinds of fruit to set than upon any other factor as to profit in the orchard.

Neglected fruit trees are not worth the ground they occupy; they are an eyesore, and when pest-infested they are a positive menace to the neighborhood. —"Weekly Fruit Grower."

An ignorant, ill-tempered, loud-voiced man should never be tolerated in any stable.



The Wolf River, a Valuable, Hardy Winter Apple.

I am often asked to recommend a good, reddish, winter apple, which is hardy enough for an extremely cold climate. I can confidently recommend Wolf River apple. At Green's fruit farm Wolf River bears abundantly and the fruit is handsome and more than usually free from blemish. Though we have over a hundred varieties of apples in Green's experimental orchard, I know of no variety that makes a finer showing than Wolf River. The quality is good, but not equal to Spy or Hubbards-ton. The Wolf River originated in Wisconsin. Specimens have been grown weighing twenty-seven ounces. It is excellent for cooking or baking. Prof. Beach in his great book, "The Apples of New York," speaks as follows of the Wolf River: "It resembles the Alexander very closely in size, form and color, and is supposed to be a seedling of Alexander. It has largely supplanted Alexander in the west. Its season in New York is from September to December, keeping in cold storage until April. It is hardy and a good grower, highly colored and sells well because of its attractive appearance. Quality is fine, good flesh, firm and tender, sub-acid and a little aromatic."

Some Facts About Pears.

Mr. S. B. Taylor gathered eight bushels of good pears from one tree, beside the culls, and sold them readily for \$1.00 per bushel. This tree is about ten years old. Numbers of our people sold all the pears they had, readily, at \$1.00 per bushel and could have sold carloads of them if they had had them. This is not an unusual year for pears in this country, but is the first year that we have had railroad service so we could ship them. I have been growing pears for the eighteen years mentioned, and can truthfully say we have no off years for the pear. I have always sold them at the above price.

I can plant fifty pear trees next spring and after one year I can gather pears from probably one-third of the trees. This would be only two or three pears to the tree, however, so you see you will begin to get a good crop almost as soon as strawberries or other small fruits, which thrive equally well here.

Here is an example: take forty acres of land and put it in pears, the first five or six years, it will have paid you for troubles, taxes, etc. After six years you can safely count on three bushels per tree, 108 trees to the acre, twenty feet apart, count eight trees off for accidents, and those not bearing from any cause, which would leave 100 trees or 1000 trees to forty acres which at \$1.00 per bushel and it is not an exaggerated price, and you would have \$1200, enough to pay for land and all improvements. Land for this purpose can be bought for from \$5.00 to \$10.00 per acre. Now after the sixth year, it will double up very fast, for you can count on ten bushels of pears to the tree, after ten years, which would bring \$40,000.00 and this would mean year after year—W. D. Craig, Mo.

"Have you ever loved before?" asked the coy maid. "Yes," yawned the worldly young man, "but—er—never before a chaperon, two small brothers and a pet bulldog." And then she suggested a trip down the old road to see the stars.—Chicago "Daily News."

Pears and Their Cultivation.

The list of pears is too long to select a few from and call them the best, says "Practical Farmer." In Pennsylvania we have a half dozen or so old favorites which are found in all collections. My own trials have been with about one dozen, grown for family use. A neighbor tells me that of all the pear trees he sells, Bartlett leads five to one; next is Seckel, then Clapp's Favorite, Howell, Kieffer, Lawrence and Sheldon, in the order named. This is not just as I would arrange. If I wanted but one, I would start with Bartlett, but my second would be Lawrence; third, Clapp's Favorite; perhaps the fourth Seckel. Then Howell, Sheldon, Vermont Beauty, Anjou and perhaps Kieffer. I would put



KIEFFER PEARS.

Seckel about fourth, not but that its flavor is worthy of its being in the second place, if not in the first, but because of its tardiness in fruiting. It takes many more years for it to bear than it does the other, but when it does fruit, one has a pear of the highest excellence. The Lawrence is much over-looked in garden collections, though orchardists know its value; and in the pear district of New York state there are orchards wholly of it. It is to be gathered just before frost; and in any cool place will keep until the end of winter. In the south, where the Chinese type does better than the others, the LeConte, Garber and Kieffer will be required, with Kieffer leading. Regarding cultivation, any ordinary situation does for pears. They are to be seen in all sorts of places, doing well everywhere, excepting in wet ones and those of a hilly, dry nature.

Lawrence Pears in April.

We find no difficulty in keeping winter fruits much longer than their reputed period, by observing two conditions. The fruit room, which is part of the basement of the dwelling, is separated from the rest of the basement by an eight-inch brick wall; the sides and bottom are cemented with water lime, and the ceiling is lined with building paper. The swinging windows admit any degree of ventilation, and with the aid of thermometers the temperature is kept near the freezing point. This low temperature is one of the two conditions. The other is the selection of long-keeping specimens. Some will ripen much sooner than others, and by placing them in single layers in drawers or in shallow boxes, the ripe ones are taken out for use, and the hard, longkeepers left. In this way we have kept pears the past winter one or two months longer than the ordinary time, and had good specimens of the Lawrence in April. They had lost some of their flavor, but were still quite good. The Winter Nellis did not hold its flavor nearly so well. There is a difference in seasons—some bringing the fruit to maturity sooner than others. Baldwin apples are usually kept in the same way till June; but after the weather becomes warm it is more difficult to keep the fruit room cool, and they soon begin to lose their flavor.

A Few Fruit Grower's Observations.

A man learns to live just about the time he has to die. The fruit grower learns how to grow fruits at about the time he dies. It might benefit some other fruit grower to read this article. One of the greatest pests in peach and Japan plum growing is brown rot, says "Rural World." Well, this obstacle is about overcome. The United States Department has solved the problem, by simple use of self-boiled lime and sulphur. Use eight pounds slacked lime and place in a barrel, stir and screen and add eight pounds of sulphur to fifty gallons of water. Spray the tree before or during wet or damp weather. It will not burn the leaves or fruit. To make the complete cure for rot and curculio with lime and sulphur, add arsenate of lead, as these three will prevent brown rot and curculio. The sulphur deals with fungus, and lead upon curculio correctively. The varieties that proved most resistant to rot and curculio and frost injury were Crosby, Wager, Helly, Belle of Georgia, Nut Rose and Champion.

Sow wood ashes broadcast in the orchard.

My Way of Treating Cherry Trees.

Written for Green's Fruit Grower by Mrs. E. Ulrey, Ohio.

In the spring I took the teakettle and poured hot water around the roots. Then whitewashed trunks and limbs as far as I could. Then sprayed with arsenate of lead and limewater. The first time just before blossoms opened (but I do not think that was necessary for the bugs did not begin to sting until the cherries were about half grown). I thought my cherries were gone, but I kept on spraying, especially after every rain. The stung cherries kept on growing and when ripe there was no worms only a little black spot where they had been stung. My trees are Early Richmond and Montmorency. They were loaded with the most beautiful fruit—but the birds, oh how they did swarm. I tried everything I had heard, even to shooting at them, but they got so they would only hop to the next limb. Finally I hunted up all the bells I could find, strung them on a string, tied them up in the trees. Then took a twine string long enough to reach from bells to the house. Tied one end of twine to the bells, the other end I fastened near the back door, and every time anyone was near, we would give the string a jerk. Finally they got so they did not care very much for the bells. We finally saved most all the cherries but dear me, I think I earned all I got. I did not continue spraying the plum trees long enough, so lost all of them.

Competition in Fruit.

The western fruit growers are wiser in their generation than their colleagues in the east, and their cleverness and enterprise enable them, to a large extent, to overcome the handicap of the long haul across the continent incident to placing their product in the English market. With apples of no higher grade than those grown in Monroe county the western horticulturists are more than holding their own in supplying the English demand.

One of the prime secrets of the success of the Washington and Oregon orchardists lies in the methods of grading and packing the fruit, and in giving these methods due and persistent publicity on the other side of the sea. In this respect the work of fruit producers in the west coast states must be regarded as artistic.

At the third National Apple Show, recently held in Spokane, Washington, no less than \$20,000 was offered in prizes for excellence in fruit and for superiority in grading and packing. The money was wisely invested, from the standpoint of the western fruit industry. It not only encouraged every grower to seek for superiority in the quality of the fruit, and bring the grading and packing to a high degree of excellence, but it served to give the methods large advertisement in the desired markets.

Rather Warm.

"Speaking of warm weather," said a Kansas farmer to his neighbor, "reminds me of one summer several years ago. I had three acres planted in popcorn, and do you know it got so blamed hot the whole three acres popped at the same time."

Fruit Sprayed with Bowker's "Pyrox"

brings more money because it is free from injury by worms, scab, etc. Over 300 testimonials in our new catalogue show the great value of this preparation on all kinds of fruits and vegetables. Pyrox serves two purposes; it kills insects and prevents disease and blemish. It adheres to the foliage even through heavy rains, saving labor and cost of re-spraying. Perfectly safe. It is all ready to use by mixing with cold water. Every grower who seeks fruit and vegetables free from blemish needs "Pyrox," the "one best spray." It

"Fills the barrel with the kind they used to put on Top"

Send for new catalogue with photograph of sprayed and unsprayed fruit in original colors. Will convince the most skeptical. Say how many and what kinds of fruit trees, or how many acres of potatoes you have to spray, and ask for special prices. We ship from Boston, Baltimore, and Cincinnati.

BOWKER INSECTICIDE COMPANY,
43 CHATHAM STREET, BOSTON, MASS.

Peach Prospect—Examining Buds for Evidence of Winter's Work.

The bud and blossom experts among the fruit growers of Manchester, N. Y., who are now engaged in examining the peach buds to discover if they have been damaged by the winter, give many conflicting reports. E. H. Perry, who is considered an expert on peach culture, from a scientific standpoint and who is the owner of a peach orchard of over 3000 trees, finds the buds in a good, healthy condition in his orchard at this time, and very little wood winter-killed, says Rochester "Herald."

Many of the smaller growers of peaches, who have investigated, find a large percentage of the buds either killed or in bad condition. Mr. Perry states that this difference in the condition of the buds is due to the location of the orchard and the soils, as muck soils and heavy clays are retentive of moisture, and in general all wet, or flat frosty lands are to be avoided.

Although this has been a long and cold winter, though not considered a severe winter, some peach buds are ruined while other orchards on higher ground give a promising outlook unless caught by a late frost at the opening time.

Montmorency is a very large, light-red, long-stemmed cherry, flattened on the ends, flesh more solid than in the Richmond, and of about the same flavor. The tree is a strong, erect and symmetrical grower, and all points considered, it is with me the hardest of all. Mr. Bailey, of Cornell, claims it to be a bearer of great crops of fruit, even outdoing the English Morello when in full bearing, which is a year or two later than that variety. He refers to a Mr. Scoon, who considered a crop of eight to ten tons a good one from his 800 trees, and, selling at 5 cents a pound, brings \$1 per tree or \$130 per acre from trees set eight years.

Customer.—Look here! This milk of yours is half water and half chalk, yet you advertise it as strictly pure.

Milkman.—Madam, to the pure all things are pure.—London "Sketch."

For All Kinds of SPRAYING

—no other sprayers can do the work as effectively, economically and rapidly as

Brown's Hand & Power AUTO-SPRAYS

—40 styles, sizes and prices to choose from—one to suit your needs. Auto-Spray No. 1, fitted with Auto-Pop Nozzle, has force enough for tall trees. 15 seconds' pumping gives power for 10 minutes' spraying. 4-gallon tank easily carried over shoulder. Sprays stream or fine mist. Saves solution. Auto-Spray No. 11 6 rows of potatoes at once—any width. Constant pressure up to 150 lbs. No expense for power. Fitted with Non-Clog Atomic Nozzle—adjustable for forward stream or light mist. Write postal now for our book and

SPRAYING GUIDE FREE Shows what and when to spray. Quotes prices on the sprayer for you, whether hand, gasoline or traction power. Write postal for book now.

The E. C. Brown Company
75 Jay St., Rochester, N.Y.

BARREL SPRAYER READY TO USE

Can be drawn on sled or wagon, by one horse, through orchard or garden. Pump is entirely outside of barrel and solutions, and is similar to the one on our Combination Field Orchard Sprayer—100 to 125 pounds pressure—one or two leads of hose—convenient check valves—no leather packing. 60 gallon, horizontal barrel—no danger of upsetting whether empty or filled—nothing inside but the dasher. Ask us quick for information on this latest addition to the

IRON AGE
Line of Farm and Garden Implements.
BATEMAN MFG CO.
Box 100-B
Cranford, New Jersey

Make Sure That YOU and Not the Insects Get the Profits

from your orchard. Prevent their ravages by spraying thoroughly with

ELECTRO Arsenate of Lead

(In Powdered Form)

It is your surest and safest weapon because it contains 32 1/2 to 33% arsenic oxide—50% more than other brands—and less than 1/2 of 1% water-soluble arsenic. Our Electro process assures these percentages, not found in any other make. Hence Electro has greater killing power and better adhesion, suspension and distribution than any other brand.

Write for tests by Conn. and N. J. Agri. Exper. Stations and be convinced we are right. Ask for valuable folders on Electro Arsenate of Lead and Electro Lime-Sulphur (certain death to San José Scale and sucking insects, and the best summer fungicide).

If your dealer can not supply, send for prices, proofs, and name of nearest distributor.

THE VRELAND CHEMICAL CO.
48 Church Street, New York

Don't Put Off Painting— It Will Prove Costly

The longer you put off painting the more oil and lead the job will take.

While you wait your buildings rot, exposed to the weather. The cost of paint made of

"Dutch Boy Painter" white lead and pure linseed oil is not so high as you may think.

For an average house, the cost now of this genuine old-fashioned, mixed-to-order pure white lead paint is not more than \$4 or \$5 greater than it used to be. Much cheaper than repair bills.

Write for our free "Painting Helps No. 348."

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PEAR PSYLLA

The worst enemy of the Pear Growers cannot be controlled with lime sulphur, but "SCALECIDE" used in the Spring just before leafing will not only control the Psylla but San Jose Scale and all fungus trouble controllable in the dormant season.

PRICES: In barrels and half barrels, 50c. per gallon; 10 gallon cans, \$6.00; 5 gallon cans, \$3.25; 1 gallon cans, \$1.00. Conclusive proof in Booklets, "Orchard Dividends" and "Modern Methods of Harvesting, Grading and Packing Apples." Both free.

If you want cheap oils, our "CARBOLENE" at 30c. per gallon is the equal of anything else.

B.O. PRATT CO., MFG. CHEMISTS, 50 CHURCH ST., N.Y. CITY.

IRRIGATION PROBLEMS in the orchard solved without pumping expense for power and at low first cost with an automatic

RIFE RAM

Cheapest and most efficient water supply for country place, irrigation, farms, etc. Satisfaction guaranteed. Booklet, plans, estimates, free. Rife Engine Co., 2414 Trinity Bldg., N.Y.

SPRAY FOR SCALE

Don't wait for scale to attack your trees. Keep it off by spraying with

Good's Caustic Whale Oil Soap No. 3

Quickly exterminates San Jose Scale and all other parasites and enemies to trees and plants. Contains nothing injurious. Fertilizes the soil and quickens growth. Used and endorsed by State Experimental Stations and U. S. Department of Agriculture. 50 lbs., \$2.50; 100 lbs., \$4.50; larger quantities proportionately less. Send for free "Manual of Plant Diseases."

James Good, Original Maker, 253 No. Front Street, Phila.

Gooseberry Huller

REMOVES ALL STEMS AND BLOWS from gooseberries. Greatest of labor savers. Price, \$15.00. Write for circular to Wm. Urschel, Valparaiso, Ind.

New Strawberries

Nearly 100 varieties to select from. We guarantee our plants to be high grade and equal to any. Our 15th Annual Catalog is ready. Write for one.

The Flansburgh & Potter Co.
BOX 335 LESLIE, MICH.

Save Money on Berry Boxes and Baskets

Fruit and Vegetable Packages and Growers' Supplies of all kinds. Write for free money-saving catalog and price-list.

Largest Factory of its Kind in the Country.

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For Best EXTENSION LADDER at factory prices write to

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CREATE MULCH

AND CONSERVE MOISTURE FOR YOUR TREES



Woods and cultivates. Turns and covers. Breaks hard soil, kills weeds, etc. Renew old meadows. Price is low and will pay you large profits.

WALLINGFORD, CONN., March 2, 1911.

Eureka Mower Co.—We are using your Eureka Cultivators and Seeders in our peach orchards for conserving soil moisture and making a dust mulch. They are the best tools for this purpose we have ever found. W. A. Henry & Son.

Write for FREE catalog.

EUREKA MOWER CO., Box 570, UTICA, N. Y.

C. A. GREEN'S RELATED NOTES.

A New Method of Grafting.

We hear that a novel device for grafting has been discovered in Belgium. I regret that this information comes too late to have an engraving made showing the simple process mentioned, which is entirely different from other methods of grafting, inasmuch as a piece of rubber tubing long enough to cover the wound, both at top and bottom, is used in place of grafting wax or other wrapping, used previously. By this new method both scion and tree are cut obliquely (slantingly), then a piece of rubber tubing is caused to pass over the two joined parts, after the parts have been fitted closely together. The rubber tubing is now cut of such length as is necessary to make it the proper length to cover the graft. The tubing should be of a size which will fit the scion and stock closely. If the tubing fits as it should it will exclude the air entirely and hold the scion and stock in a firm grip, and the rubber tubing will expand as the branch grows, and will finally drop off.

I recommend that readers of Green's Fruit Grower try this novel method of grafting. All these experiments are interesting. Grafting itself is one of the most interesting incidents in the fruit grower's experience. Why not have on your place an apple or a pear tree which produces fifty or one hundred or even more varieties of fruit ripening at different seasons? Will not this tree be of great interest, not only to yourself

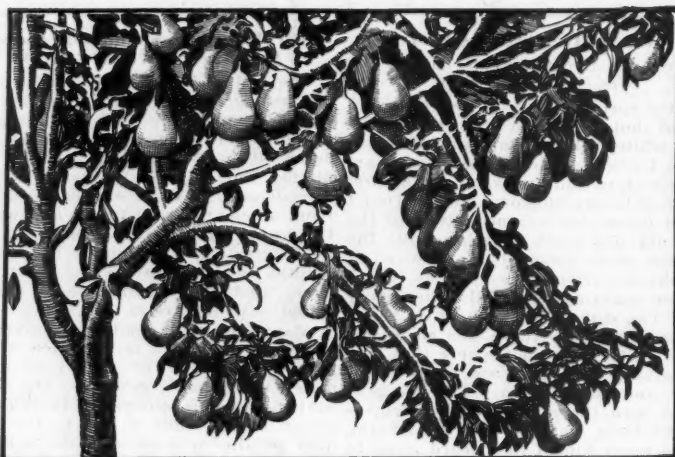
of a dwelling or for planting on a lawn for the purpose of a shade tree. Last summer when visiting a farmer, who, besides agriculture, is deeply interested in fruits, I was pleased to find, facing and shading the porch on which we were sitting, two fine cherry trees, full of ripe fruit, of what appeared to be the



Black Tartarian variety. The trees were luxuriant, some thirty feet in height, and were bearing a fine crop of fruit. These trees served every purpose of shade trees, being of good outline, ample foliage and throwing a good shade. The time to plant cherries is in the fall, or very early in spring. It is but to meet failure to set them after the buds start out, this fruit tree being almost alone among its kind in this respect. An apple, a pear or a plum, may be set late, but not a cherry. The Black Tartarian already mentioned is a reliable black sort. Napoleon, Windsor, and Schmidt's Bigarreau are also good black sorts.

Controlling San Jose Scale.

Don't neglect your orchard. I want to sound a warning to those having orchards affected with San Jose scale, and who have not already adopted measures for stamping out the pest.



BARTLETT PEARS.

but to your neighbors and other friends?

Soil Sickness.—At Green's fruit farm we occasionally find a small patch of ground perhaps not over a rod square on which nothing will grow successfully. We call such soil sick for lack of a better name. We are informed that sick or tired soils are usually accompanied by the presence of microbes of butyric fermentation. In such a case the soil should be disinfected with a solution of tricresol, a substance harmless to the plants. The application of lime is suggested by the Porto Rico experimental station report.

Grafting Kleffer Pears.—I know of no reason why you should not graft your Kleffer pear or Bartlett or any other variety. I say this knowing that some people think that Kleffer is not a good stock. I do not recommend you to graft a large number of your trees without first experimenting.

Poplar Trees for Windbreaks.—Plant windbreaks, consisting of rapid growing trees planted in a straight line on the windy side of the orchard. Take my word for it such a windbreak is inexpensive and may in one day save you all that the windbreak may cost, though it will be helpful for fifty years. Usually a single row of rapid growing trees such as the poplar will make an excellent windbreak. Often only one row of trees is necessary, though in a very windy location it may be well to have two rows of trees in the windbreak. The Norway spruce makes an ideal windbreak, but is a much slower grower than the poplar and requires more attention during its early years than the poplar. While the windbreak may not be needed until the orchard comes into bearing, it is well to plant it at about the time the orchard is planted, in order that it may be large enough for service when the apple orchard trees bear fruit.

Cherries for Shade.

Besides for their fruit, the various kinds of sweet cherries should be planted for shade, says "Practical Farmer." In the more northern states the pie cherry is the chief reliance, being harder than the sweet ones. This could not be set for shade, being of too low a growth, that is, for the shading

The scale can be controlled by proper spraying with the home-made lime and sulphur mixture, commercial lime and sulphur or soluble oil. If you use a commercial product, be sure it has been thoroughly tested out and is all right. This can be ascertained by writing your state experiment station, which will gladly give you information on the subject without charge, says "Practical Farmer." Having decided on the preparation you will use, if you do not already have one, get a good sprayer capable of developing a high pressure, with efficient agitator and well constructed to stand the action of the chemicals used. The sprayer should have brass valves (preferably brass ball valves) and should have no internal parts made of leather or rubber, as they are soon eaten out by the chemicals. If your trees are not badly infested it will not be necessary to do any severe pruning, but if the trees are in bad shape, to get the best results it will be necessary for you to prune or cut them back considerably. The limbs cut off should be burned immediately. In applying the spraying material be sure that you cover every part of the tree, as the solution kills the scale by contact. In mixing the spraying solution follow instructions for preparing carefully, as any deviation from the directions may not only not be effective, but may cause serious loss. Spraying for the scale accomplishes a double purpose, as the mixtures used, especially the lime and sulphur, are also good fungicides, and spraying at this time of the year will not only destroy the scale, but will help rid your trees of fungous diseases and you will find that your investment in spraying apparatus, material and labor will have paid you well, as it is the only means of saving your trees from the ravages of the scale diseases and will also greatly increase the quality and quantity of your fruit crop.

"The count has promised that he will never beat or kick me if I will marry him," said the beautiful heiress.

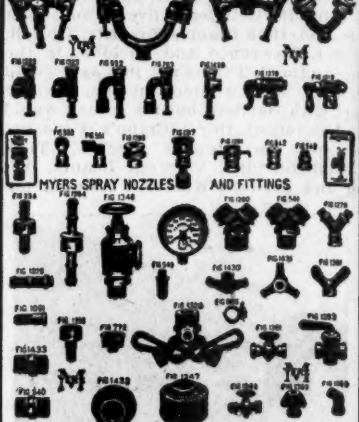
"But has he promised to work for you?" her father asked.

"Oh, papa, don't be so unreasonable."

—Chicago "Record-Herald."

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ALL KINDS NOZZLES, FITTINGS, Etc.



Send for catalog and prices of Pumps, Hay Tools and Barn Door Hangers.

F. E. MYERS & BRO.,
160 Orange Street, Ashland, Ohio.

Please mention Green's Fruit Grower.

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asks you to write at once for a new booklet just issued by his orchard company, telling of a prudent, profitable investment for \$1.00 to \$1,000. Easy terms if desired. American Nut & Fruit Co., 8780 Drexel Bldg., (H. E. VAN DEMAN, Pres.) PHILA.

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No money in advance—pay us out of extra profit. Sprays anything—trees, potatoes, vineyards, truck, etc. Pushes easy—high pressure. Guaranteed 5 years. Pay when you can—wholesale price. We pay freight. Catalog and Spraying Guide free. Free Sprayer Offer to first in your locality. H. L. HURST Mfg. Co., 221 NORTH STREET, CANTON, O.

25 POTATO SPRAYER—25 ORCHARD SPRAYER

STRAWBERRY PLANTS that pay to grow—money makers. Seed corn. Second-crop seed potatoes. Write to-day for free seed, plant and poultry catalog. It tells the plain truth about the best seed and plants to plant for best success. J. W. HALL, MARION STATION, MD.

Harrison's NURSERIES

BERLIN, MARYLAND

Back of all this talk about growing fruit that we see in print and hear everywhere there is a growing demand for fruit. More people are learning that fruit is a good thing to eat every day of the year round. In city and country—with laborers and with judges—the movement is like the spring swelling and bursting of a seed in warm soil.

WHO DOES GROW TREES RIGHT?

Are you going to get at it right? Are you going to grow all the fruit you can use, at least? Then remember that Harrison's are the standard fruit tree and plant growers of the United States, and that Harrison trees and plants are standard. Down here in the warm, loose soil of the east shore of Maryland, near the ocean, we give the care needed, keep records of tests of varieties, and grow the sturdiest and healthiest of trees and plants, with wonderful root systems. When you buy them, you insure yourself against misnamed kinds, diseases, stunted growth and poor roots.

WE SUCCEED, AND HELP YOU TO

Hundreds of thousands of bearing trees and a hundred acres in strawberries are telling us the secrets of the various kinds while they make us money. For thirty years we have been quietly growing larger, larger, LARGER. This year we probably have more peach trees and more California Privet than any other grower in the world, and we have enough apple, pear, plum and cherry trees, grape vines and strawberry plants to keep two hundred and fifty workers busy taking care of them—enough to let us pick out the finest only to sell, leaving culls and seconds to destroy.

OUR 1911 BOOK IS ALL NEW

It isn't as big as some, but it's complete, and all new—no old chestnuts of descriptions or pictures. The main facts about each sort are given, and you can depend on what it tells you. Don't YOU be satisfied with any second best trees, or with unfair prices. And get to know who's who in the fruit tree line. Right now get Harrison's book. Keep it handy, and when the time comes, get trees for your orchard, that have a straight pedigree, a straight name, a straight stem, a big, fibrous bunch of roots. The Harrison name guarantees these.

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Harrison's Nurseries

Please mention Green's Fruit Grower.

A SPRING PLANTING.

How to Plant Trees, Etc., and Make Them Live.

More fruit trees and more ornamental trees, plants, shrubs and vines will be planted this spring throughout this country, than ever before in any one year. Tree planting seems to be increasing. The question arises how can the best success be secured in planting. If properly planted not one tree in a thousand should perish. But since tree planting is often done by inexperienced people many trees perish and then the blame is thrown upon the nurseryman who sold the trees which is not always just.

There are six important things to be done to make a tree live and thrive after planting. First, keep the roots of the tree before planting moist every moment. Second, cut back the head, that is the branches of every fruit tree, leaving simply short stubs of branches four to six inches long. Third, in cultivating ground where cultivation is to be continued, it is not necessary to dig a hole larger than is necessary for placing the roots in easily without bending or crowding them. Usually one foot deep is deep enough to dig a hole in which the tree is to be placed, but it may be made a few inches deeper. If so the hole must not be filled full, but left in a dish-like shape so that the rains will wash toward the tree instead of from the tree. Fourth, see that the first two shovels of earth placed over the roots of the tree are packed down firmly. Every other shovel of earth placed on the roots should be packed firmly except the last shovelful, which should be left loose so as to make a mulch to retain moisture. Fifth, after the trees are all planted place a forkful of straw manure on the surface of the ground about the base of the tree. Sixth, if the tree is planted where the soil is uncultivated, and where the grass is allowed to grow, dig a hole for the tree twice as broad as you would dig the hole in cultivated soil. Be careful not to allow the grass sods or any form of manure to come in contact with the roots of the tree. Place fine dirt over the trunk of the tree and press down firmly. Put two or three forkfuls of stable manure around the tree to prevent the grass growing and to hold the moisture. Many plants and trees perish after planting for the reason that the earth is not pressed firmly around the roots and for the further reason that the branches of the tree are not cut often as recommended above. In planting a grape vine or a rose bush the top should be cut back even more severely. Last year I saw rose bushes which had been carefully transplanted, the canes of which were three to four feet high. I told the owner that I would show him how the cane of the rose bushes should be cut back. Then I cut off the long branches, leaving short stubs four to six inches long. Grape vines when planted should be cut back even more severely than I have recommended the rose bushes to be cut. If the soil is hard where the tree is planted draw a wheelbarrow of soil from the garden to place over the roots. —C. A. Green.

From Mi Dikshunary.

Written for Green's Fruit Grower by Unkel Dudley.

Bachelor—A ship on life's stormy sea with only the skipper to hold the tiller and reef the sails.

Christian—A child of the King; born into His kingdom and living only to please Him.

Doubts—Peace destroyers made by Satan and presented by him to Christians as others.

Envy—A spirit from the bottomless pit that often dwells in the human breast.

Kindness—A heavenly plant that blooms in the human heart only to bring and bless other lives.

Flowers—God-given earth stars that delight the eye and gladden the heart.

Hate—A flame from the lurid fires of hell, kindled in the human breast by Satan.

Peace—The love of God shed abroad in the heart, an ruler of the life.

Neighbor—A human brother, who will gladly give you a lift on life's rode whenever he can.

Advice—That which we freely give to other people, but are not willing to take.

"You don't look a bit well," says the mother of the college boy. "Have you been studying hard?"

"Yes, indeed," answers the lad.

"But your professors say you are away behind in your lessons."

"Well, what can they expect? I've been studying hard ever since I started in, learning all the class yells. Now that I've got them committed to memory, I suppose I can give a little time to those books."—Chicago "Evening Post."

Mark Twain Said.

The true Southern watermelon is a boon apart and not to be mentioned with commoner things. It is chief of this world's luxuries, king by grace of God over all the fruits of the earth. When one has tasted it he knows what the angels eat. It was not a southern watermelon that Eve took; we know it because she repented.

As to the adjective: when in doubt, strike it out.

Why is it that we rejoice at a birth and grieve at a funeral? It is because we are not the person involved.

It is easy to find fault if one has that disposition. There was once a man who, not being able to find any other fault with his coal, complained that there were too many prehistoric toads in it.

There is this trouble about special providences—namely, there is so often a doubt as to which party was intended to be the beneficiary. In the case of the children, the bears, and the prophet the bears got more real satisfaction out of the episode than the prophet did, because they got the children.

Whoever has lived long enough to find out what life is knows how deep a debt of gratitude we owe to Adam, the first great benefactor of our race. He brought death into the world.

Tell the truth or trump—but get the trick.

Adam and Eve had many advantages, but the principal one was that they escaped teething.

Adam was but human—this explains it all. He did not want the apple for the apple's sake; he wanted it only because it was forbidden. The mistake was in not forbidding the serpent; then he would have eaten the serpent.

The holy passion of Friendship is of so sweet and steady and loyal and enduring a nature that it will last through a whole lifetime if not asked to lend money.

Consider well the proportions of things. It is better to be a young June bug than an old bird of paradise.

There are three infallible ways of pleasing an author, and the three form a rising scale of compliment: (1) to tell him you have read one of his books, (2) to tell him you have read all of his books, (3) to ask him to let you read the manuscript of his forthcoming book. No. 1 admits you to his respect, No. 2 admits you to his admiration, No. 3 carries you clear into his heart.

Even the clearest and most perfect circumstantial evidence is likely to be at fault, after all, and therefore ought to be received with great caution. Take the case of any pencil sharpened by any woman: if you have witnesses you will find she did it with a knife; but if you take simply the aspect of the pencil you will say she did it with her teeth.

Pointed Paragraphs.

A man often deserves praise for doing his duty.

Men with grievances stick to the truth, sometimes.

Sooner or later the chronic kicker will kick himself out.

It isn't always the hit dog that does the most howling.

Nothing sobers a miser quicker than to find that money is tight.

All the world's a stage, but only a few of us get the spotlight.

It's easier for a woman to mend her husband's clothes than his ways.

Ever notice how polite a man is when he wants to let you loan him money?

No doubt there was many a lemon given in the guise of a Christmas present.

It is better to be known by the company you keep than by the friends you give away.

After a girl has been engaged three or four times she finds it almost as exciting as a man does when he gets his hair cut.—Chicago "News."

I think all the great intellectual facts must have been achieved in winter, all the great poems written, all the heroic enterprises planned. If you can't make your thoughts weld in winter and your courage stick, how can you hope to do so in the dissolving and enervating summer? If we grow in summer, we season and ripen in winter. As for my own case, my apples are nearly all winter apples and late fall apples. Not until the frost comes do they begin to mellow and loosen from the bough. Perhaps with all of us our winter thoughts and purposes and attachments have keeping qualities that belong to those of no other season.—John Burroughs.

"The eye that mocketh at father, and despoileth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it."—Prov. 30:17.

NO PAINT Ever Needed on this Roofing

The need of paint or gravel on a roofing is positive proof of its weakness—positive proof that the materials in the roofing would dry out, rot, rust, decay or otherwise deteriorate without such protection—positive proof that the roofing itself can't last long unless protected with a mineral.

Instead of a perishable animal or vegetable material only temporarily protected with a thin layer of mineral, such as paint, slag or gravel, J-M Asbestos Roofing is one solid mass of minerals. Not a particle of perishable material in it.

J-M Asbestos Roofing consists of layer-on-layer of pure Asbestos Felt securely cemented together with genuine Trinidad Lake Asphalt. Asbestos is a rock, or stone, and of course stone needs no paint to make it last. And the Asphalt Cement between these stone layers is the same mineral that has withstood the severe duties of street paving for forty years.

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is the only ready roofing that never requires a single cent's worth of paint or other protection. Its first cost is its only cost.

Other ready roofings are a continual trouble and expense—for the paint and gravel wash and blow off and have to be renewed every few years.

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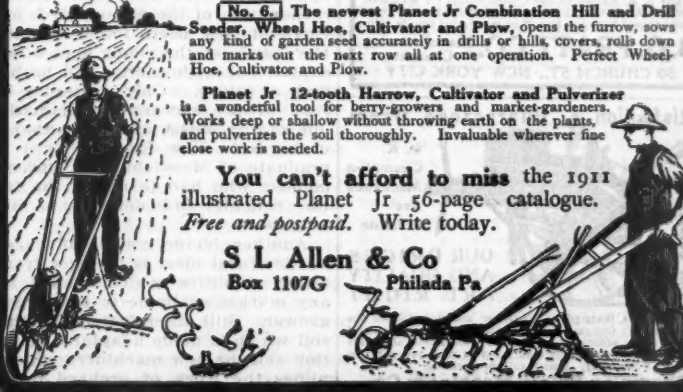
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THE FORKNER LIGHT DRAFT HARROW

is the only perfect light running wheel cultivator ever offered for orchard work. Each section is so easily manipulated with levers that a small boy can operate it and cultivate perfectly 30 acres per day with one team of medium weight. With this harrow, one team can easily do the work of two teams with ordinary harrows. Works well in stumpy or stony land and does not clog with loose grass, roots, etc. Its extension of 11 ft., 3 3/4 ft. each side of the team, enables perfect dust mulching near the tree trunks without disturbing the branches or fruit, and eliminates the use of the hoe. One machine will work 100 acres of orchard and keep it in garden till. These machines are labor savers and will reduce your cultivating expense one-half, even if you have but 5 or 10 acres of orchard. Write to-day for prices

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10-gal. keg making 2,000 to 5,000 gals. spray, delivered at any R. R. station in the United States for \$12.50. Prompt shipments. Every grower of fruits and vegetables should have our Report of wonderful results 1913.

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Our O. K. Champion Planter makes and saves the owner money. One man and team plant five or six acres of potatoes a day accurately and easily. Learn more about this and our line of potato diggers, etc. Let us send you our Free Catalog. Write today. Dealers sell our machines.

Champion Potato Machinery Co.
131 Chicago Ave., Hammond, Ind.

Good Story Prize Contest

Note:—It will be decided later which articles are entitled to the prizes offered.—Editor.

PRIZE STORY CONTEST NO. 1.

"Back to the Soil."

By Robert A. Lamson.

The "Back to the Soil" movement is one of the most characteristic things of the twentieth century. It is alive and teeming with the welfare of the young man, both physically and financially. Its causes and its effects are known to all.

This movement, however general in its conception, has many phases, many pathways to travel after the young man has come back to the soil. Thus, he may feel a call to raise and care for horses and cattle, and he becomes known as a stockman; perhaps he has a liking for the raising of vegetables and small fruits and he becomes a truck farmer; then again, his imagination may picture his meadows bedecked with the beautiful apple blossoms in the springtime, and horticulture and the raising of apples and peaches and pears becomes the theme of his life.

Thus, do we see that in the pursuit of agriculture, the idea of horticulture may be the dominating spirit which causes a certain percentage of those who come back to the soil, to do so.

At this point it is well to speak of the two classes of men to whom it ap-

grow best in certain localities. These things, combined with the scientific forecasts of the weather, give to the fruit grower the highest degree of authority and control over his orchard crop which make for his greater profit and pleasure.

What man can contemplate these things and not feel enthused? The work is pleasant and congenial. "His hours of labor are interspersed with hours of rest and his barns are filled with plenty. Every season brings its trials and its tasks, but also its delights." After all what is nobler than the tilling of the soil?

PRIZE STORY CONTEST NO. 2.

Turkeys for Profit.

By M. Huddleson, M. D., D. C.

Growing turkeys is a profitable industry. The birds go ahead for their living. It is the nature of turkeys to roam and hunt insects. There is nothing they like better.

The young should be given very careful attention for the first four weeks of their lives. After that it is best to give them all the freedom possible. "Free range and no favors," is the turkey slogan. Cooped turkeys as a rule do not fare well.



WHITE HOLLAND TURKEYS.

peals. There is first the man who has made a success of life but who feels the call of nature. He longs to be among the growing plants and trees, caring for his products and harvesting his fruits, while the enthusiasm of youth steals unconsciously into his heart and mind. There is another class, however, of which the clerks and city men in general form a larger part, which also feels the lure of the land. What enterprise requires less capital and insures better mind and body, than does fruit growing? Little wonder that the city man is attracted by such healthful and profitable work as this.

Now let us think of the attractions of the horticultural idea; of the many ways by which it appeals to the man who is searching for a happier and healthier life for himself and family. In the first place it has been found a very profitable investment of one's time and money. The new orchard practices and methods of cultivation; the intervention of science in the fertilization of the orchard; the remedies for the evils and disadvantages that had caused trouble in fruit growing in the past, such as the spraying of an orchard to exterminate the insects and other pests; the heating of an orchard to prevent effects of a frost or freeze; all of these things render the growing of fruits more lucrative and less liable to weather conditions.

It is well, also, to speak of the many opportunities in the east, since the reclamation of the old orchards of New England has been found practicable. Here, at least, the young man with little capital but with energy and brains can find a future. Only yesterday did I read of the successful reclamation of one of the oldest and most abandoned orchards in New England by a young graduate of Massachusetts's agricultural college, who had to act in the face of the ridicule and derision of all his neighbors.

Another factor which influences the horticultural idea, is the new transportation facilities which makes almost any market available to the large fruit grower. Still other factors are the new soil which is made adaptable by irrigation and the new machinery which simplifies the work of orchard practices; the new varieties which are found to

I have raised many turkeys of all of the most popular breeds. Personally I prefer either Bronze or White Holland turkeys. Bronze turkeys are hardy. They attain large size. White Holland is a little more tender when young, but it is a beautiful bird. The size it attains is considered about right for market.

Great care should be exercised to keep the young warm, dry and well fed. To a young turkey cold is nearly fatal and dew is deadly. Keep the poults in a warm dry coop at first. Feed them on cottage cheese, and for the first week give them whey to drink. The next week give them stale bread soaked in milk and squeezed dry. Also finely chopped hard boiled eggs, slightly seasoned with black pepper. A little oil cake meal may be fed occasionally. Feed the poults at regular intervals, four times a day for the first month. As soon as the birds begin to get their first feathers and turn red about the head, they are ready to forage for themselves. Take care to keep them housed during rainy weather, or during the early mornings when the dew is very heavy. Otherwise, they are hardy from this time on, provided they have been kept free from lice. More turkeys die from this one cause than any other. A very lousy turkey is soon a dead turkey. Keep the setting hens free from lice. For the young turkeys ward off lice by the use of turpentine and lard applied with a feather once a week.

When poults get to be three or four weeks old they may be fed wheat and barley. The turkey does not as readily assimilate corn as do other fowls, therefore it is a mistake to allow them to run in the feed lots where hogs and cattle are fed.

For roup and catarrhal troubles give honey and brown bread. For blackhead, which first shows in yellow droppings, separate the sick bird at once from the flock. The disease is contagious. Feed the birds in clean wooden troughs, and be sure to scald all drinking utensils. Feed the sick bird a mash of wheat and ground oats moistened with one ounce of hyposulphite of soda dissolved in one pint of water. Add ten drops of carbolic acid. Give bread and curds, a little at a time.

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Spray 30 Acres a Day

Potatoes, Small Fruits, Vines

Spraying that counts. 6 rows at a time with force to do work right. Foliage sprayed all over, under as well as on top. The Perfection Sprayer is also great at orchard work. Spray trees by hand. Easy to maintain 150 pounds pressure with two nozzles going. Strong 60 gallon tank, perfect agitation, absolutely best spray pump made. Spray pipes fold up—you can drive close to trees and in narrow places. Over 25 years a sprayer builder. I know requirements, and I know the Perfection is the right. Over 1000 in use, all giving satisfaction. Write for Free Catalog. Don't buy any sprayer till it comes.

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It can be set to stir the soil any depth desired, and to cultivate astride the row or between the rows, one-third quicker than any other garden cultivator. Easier to push than a lawn mower. No garden can afford to be without one. Write for descriptive catalogue and testimonials. If your local dealer does not handle them, write us for special introductory price.

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and you hold the moisture in the ground. Cultivate shallow or deep as the crop needs it and you release the forgotten or unknown soil properties which are needed to make the crop grow properly. We have been making farm tools for 75 years and think we have as good a line of Riding Cultivators as you need to choose from.

IRON AGE RIDING CULTIVATORS

are long-lived machines—adjustable for rows 25 to 65 inches, while in motion—teeth adjustable for depth and angle—pivot or fixed wheel, one row or two—high or low wheels—work well on hill-sides—farm close and true. A complete line. Our Anniversary Catalog will show you—also, potato machinery, garden wheel hoes and drills, etc. Address

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Box 1907 GRENLOCH, N.J.

Spray with the Comet for Surest Results

Price \$3.50 to \$4.50 Agents Wanted

Comet Sprayers are Easiest to Operate

Simplest in construction—foot rest is attached or detached instantly—Have complete Agitator and Brass Screen which prevent clogging of pump. This double acting spray throws a continuous stream 50 feet or spray fine as a mist. The fruit saved from a choice tree will more than pay for it. You need it for your orchard, vines, lawns and plants. Very durable—all brass. Weighs only 5 pounds. Thousands of fruit growers and farmers have proved it a success. Just try it for applying liquid poisons, fertilizers, etc. The results will surprise you. Best proposition for agents. Send us a postal for full information about this superior sprayer now. Get after the tree and plant pests early and make more money.

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Dept. 1 JOHNSTOWN, OHIO

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ARE YOUR FRUIT TREES FAILING?

Because of Drought, Swampy Ground, Root Blinding, Wet Rot, Etc.



RED CROSS DYNAMITE

Exploded between or under the trees will open up the subsoil so that surplus moisture can sink into it and be conserved until needed by the trees in dry weather. Blasting also makes it easy for the roots to spread, and destroys wet rot, fungus and grubs.

Write for Farmer's Handbook—Free

E. I. DU PONT DE NEMOURS POWDER CO.
Established 1802 WILMINGTON, DELAWARE

The roosts should be kept clean by applications of zenoleum or other disinfectant. Sealy leg is a parasite and highly contagious. Cure with applications of sulphur ointment.

The turkey has a voracious appetite; and by regular feeding may be induced to come home to roost.

In fattening, the necessity of a good plump turkey for market is well understood. The turkey is the easiest of all fowls to fatten, provided you go about it right. As the turkey takes on fat the flesh takes on a rich golden color. The flesh gains in flavor and tenderness if the turkey is allowed free range during the fattening process. It is unwise to pen a turkey and expect it to fatten. It frets and refuses to eat and loses more flesh than it gains. A close diet of new corn causes bowel trouble. A sick turkey is a dead turkey, usually. No fowl can be fed long on unripe corn; new corn starts up fermentation. Variety in a fattening ration is desirable for several reasons. Oats, corn and wheat in equal parts is considered a good fattening ration. Give them all they will eat clean of these grains and hurry them along by an occasional mash of equal parts of corn meal and wheat middlings to which a quantity of ground beef scrap or cut bone have been added. An occasional bit of linseed meal is also advantageous.

Good turkeys, properly dressed, are always salable. Badly butchered turkeys sell at any low price. Turkeys for market should be penned twelve hours before killing time so their crops will be empty. If killed with full crops they sour and turn black.

The demand for turkeys is greater every year, and annually the price soars. Turkey raising is a profitable industry and our Thanksgiving bird adds royal zest to any dinner menu.

PRIZE STORY CONTEST NO. 3.

Growing Strawberries.

By Patrick C. Connor, Tenn.

The first thing to be considered in growing a good crop of strawberries is the land. Always use new land, well drained, when possible. If a little gravelly so much the better. After selecting the land the next thing is to put it in the best possible condition. I much prefer spring setting and if possible plow ground in the fall and let

it freeze during the winter. Just before ready to plant harrow well. Then mark it off; say three and one-half feet apart, by throwing two furrows together. This gives a good loose place to set in and for the roots to get a good start. Now we are ready to set, and this is one of the main things in getting a good stand and having a good crop. This is my way: I use a small trowel in making a hole. Work the trowel back and forth until there is room for the roots to go in without crowding. Take the trowel out and firm the ground well around the roots. If it is dry I dip the roots in very thin mud before setting out. Set the roots in a bunch but spread them out. As to varieties, get the kind that is suited to your climate. Some berries do well at one place and at another they are no good.

If the land is in good shape when set I seldom ever work until after the first rain. I use a small one-horse cultivator and get just as close as I can without loosening the plants. Work about every ten days and after every rain if possible. Then take a rake hoe and break the crust around the plants. It is better to do this after every plowing where grass comes quickly. Be careful not to loosen plants. Don't cut the first runners off, and train them along the row. I never cut any runners off at all. Pick all the blooms during the summer and don't allow berries to form. I always work them as long as the grass keeps coming.

Don't work up a ridge but lay them by in flat rows. I have never used fertilizer as the land here grows very heavy crops without it. I have never mulched my berries either, as our winters are not cold enough to injure the plants and the dirt doesn't stick bad enough to call for a mulch. Have your berries picked with a short stem, and don't put anything in the box that is small, soft, or bird-pecked. It will pay you in the long run. Put just as good berries in the bottom as you do on top. Put your berries up in first class shape and they are no trouble to sell at a good price. The profit will depend on the yield and the price you get for them. Take it year in and year out \$150 per acre clear profit would be a good average. I have made a success growing berries with these methods and you can do the same. If you have never grown any berries try some and I am sure you will find them very profitable.

PRIZE STORY CONTEST NO. 4.

Keeping Bees on a Fruit Farm.

By H. R. Hatch, Illinois.

Beekeeping is an industry that should be followed more generally on all farms and should find a place more particularly on all fruit farms, as they pay well, and are necessary to fertilize the fruit blossoms and make them bear fruit.

Without bees and other insects, to carry the pollen from flower to flower, the fruit crop would be a failure the world over. Many seasons when there is a cold, rainy spell as the trees are blooming, we will notice that the flowers fail to set fruit, and all fall to the ground. Then we hear the cry that the cold weather was too much for the fruit, when really it was because the bees were unable to work on the flowers and fertilize them by carrying the pollen from flower to flower. Nature has so deposited the pollen on all flowers that it is impossible for a bee to get the honey from a flower without coming in contact with the pollen, and thus carries some to the next flower and so on.

On account of this alone it would pay all fruit growers and farmers to keep a few colonies of bees. But there are other pleasant features about beekeeping. Two of them are the fascinating and interesting work and study, and not least is the source of profit.

Years ago when they were kept in old fashioned hives and old boxes, nearly all farmers had a few swarms of bees, but now they are much more scarce. This should not be, as with the improved hives and appliances it is much easier to care for them than formerly. The first principles of beekeeping are simple, and yet a person who loves nature can make a deep study of the science that will show them that even the most expert bee keeper has much yet to learn.

As a side issue they do very well, and year in and out will prove very profitable. As such I have kept them for several years, varying from thirty to forty swarms. This season was very dry and it seemed as if the honey crop would be a failure, but imagine my surprise at extracting time on obtaining nearly a thousand pounds of the very best white clover honey. Some seasons I have had upwards of a ton of honey. The tendency of the price of honey for

the past few years is to be higher each year. I never have to look for a market for honey. As soon as people hear that I have new honey they are after it and I never yet have had enough to supply the home market.

One of the reasons that bees are not kept more in the cold climate is because they are often neglected through the cold winters, and without some protection the winter losses are liable to be heavy. An ordinary cellar makes a model place for wintering bees.

I began by purchasing two swarms of bees in improved hives and as I gained experience I was able to care for more as they increased by swarming. Now when my swarms become too numerous I find a ready market for a few swarms of bees here and there. I have carried on different side issues on the farm from time to time, many of which had drawbacks, but I will stay with the bees and they with me as long as I farm.

PRIZE STORY CONTEST NO. 5.

The Farm Timberland.

Frank H. Dow.

The time has come when the farmer should make a special study of his plot of woodland and endeavor to conserve its life and usefulness. He cannot afford to have any part of it wasted. A great deal can be done to protect and improve it and at the same time get pay for doing the work. A farm woodland containing a few acres may be made of considerable value to the farm if scientifically managed; and besides this, it may be made a beauty spot of the farm; a spot where it will be delightful to go for a rest and recreation on a Sunday afternoon or at some other time perhaps family picnics may be held here.

All old logs should be cut up and piled, so that it will dry out when it will make nice fuel for the kitchen fire. In my own practice I find this plan very satisfactory because it is making use of material that otherwise would go entirely to waste and this is a matter that we should consider in all farm management, because it will pay to do so; and in getting this old stuff out of the woods it improves the appearance. Old or mature trees should be looked upon as being ripe and to be harvested the same as any other crop when it

(Continued on page 16.)

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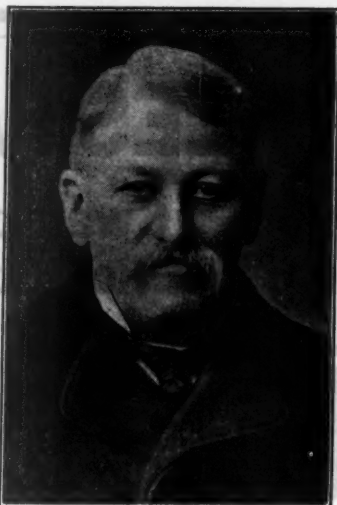
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The Veteran Soldier, Morris R. Darrohn, as he looked in later life.

Recollections of My Army Life.

Written for Green's Fruit Grower by Morris R. Darrohn. Continued from Last Issue.

I wish I could describe to you adequately this quaint, old town with its stores, dwellings, shops and picturesque hills. The town is built at the confluence or junction of the Potomac and Shenandoah rivers, a single street running parallel with each river, gradually rising on the Potomac side to the top of the hill about 200 feet high. Then following the road over a plain gradually rising about a mile, you come to Bolivar Heights. On the east side you find us encamped. Just opposite us, across the Shenandoah, on Loudin Heights, you see another brigade. Opposite us, across the Potomac, at a still higher altitude, you behold the Heights of Harper's Ferry on the Maryland side, where Colonel Miles surrendered so ignominiously. The place made notorious by the acts of John Brown. Harper's Ferry, the place where we all made our first acquaintance with—something that sticketh closer than a brother—the veritable gray back.

October 27th, just at dusk, we marched down from the heights and crossed the Shenandoah around the east side of Loudin Heights. We had really started once more for the enemy and Richmond. I remember quite distinctly, the next morning while warming myself by the side of a good fire made of Virginia rails, how I stood too near, or the fire was too hot, for my pants were so badly burned that the front fell out up to the knee. I must say I felt chagrined at my appearance, with no prospect of obtaining others for some time.

Soft Bread Once More.

A day or two later a man had the audacity to appear in the army with a wagon load of soft bread. He had taken the precaution to get a guard. The guard consisted of one man with bayonet fixed. They were moving along quite leisurely. The owner no doubt casting up in his mind the amount he would make on his load, for soft bread was an article seldom seen and greatly relished in the army. To my astonishment, as well no doubt to the owner's, a couple fellows grabbed the guard's gun, others the horses, and a couple jumped on the load and dispensed it without ceremony or recompense.

November 10th found us near Warrenton, Va. The army was massed along the road side and presented arms to their old commander as he rode slowly by with his hat in his hand, taking leave of the army. The hearts of the men were depressed for they had learned to love George B. McClellan. His removal was a surprise to the army. But now we were to be commanded by Burnside, who was brave and active, and who would lead us to sure victory. Our stay here was of short duration, and we were soon on the move again.

When down near Fredericksburg, feeling over weary, my old friend and comrade, James Ward, whom perhaps some of you know, and myself fell out of the ranks and took the gait "go as you please." We run across the head and neck of a chicken which some soldier in advance had confiscated. We were glad to get the head of a chicken if not the body, and proceeded at once to dress it, build a fire and make some chicken broth. Being greatly refreshed, we proceeded on our way and caught up with the regiment just as they were moving out after halting for refreshments.

Our brigade was ordered to Belle-plain about 10 miles distant while the army went into camp. It was now

nearly dark, but our brigade moved three or four miles and rested for the night. The next day marched ten or fifteen miles and at night found ourselves near the place we left in the morning. So much for the generalship of some of the officers of the army. The following day we reached our destination, the most desolate and disagreeable place this side of the North Pole. Our duty at this place was to unload boats, supplies for the army and build corduroy road to Fredericksburg. The morning before the rejoining the division, we found, upon waking, a snow storm had visited us during the night, and to look around upon the sleepers as they lay folded in their blankets resembled the graveyard with the exception of marble headstones. Those mounds soon began to move, and shaking off the snow, began to pack up and kindle fires. The roads now being in a passable condition, we returned to our division which lay about three miles northwest of Fredericksburg.

War Is Hell.

I wish I could convey to your minds the indescribable condition of the troops at this time. Up to this time, we had nothing to cook anything in. In fact we had nothing to cook. Nothing in which to boil our clothing caused great distress. Everywhere evidences of demoralization was to be seen. We had been in our new camp but a few days when on the morning of the 11th of December about 2 o'clock came the order to turn out and pack up. Daylight found us about a mile from Fredericksburg where we rested by the road side in the woods all that memorable day. A fog hung over the city until about noon, when it lifted and drifted away, and now the work of destruction commenced. Our guns, 179 in number, opened. Conceivably, if you can, the roar and tumult of 179 guns capable of being discharged several times per minute. Add to that number the enemy's guns which must have been nearly or quite as many more, and you will have a faint idea of the awful roar which shook the earth for miles around. Just before sunset I witnessed one of the grandest sights imaginable. The troops were ordered forward to the river. As they were crossing the open plain through the sulphurous clouds of smoke with banners flying in a strong breeze, the rays of the setting sun lighting up the scene, it was one never to be forgotten.

It so happened that our regiment occupied the grounds in rear of the famous Lacy House, the one house opposite the city on the river bank. This was a large brick mansion with grounds terraced down to the road running along the water's edge. The grounds in the rear were decorated with beautiful locust trees and winding drives. A beautiful place, but so rudely entered soon laid it waste. The barns, sheds, etc., were soon torn down and placed on the ground where we could catch a few hours of sleep and rest. The rebel sharpshooters occupying the houses on the opposite side of the river were delaying the work of building the pontoon bridges, the other bridges having been burned when the army appeared before the city. To dislodge the rebels the 7th Michigan jumped into boats and pulled for the other shore. Though lead rained heavily, they pulled with a will and soon gained the other side where the Johnnies jumped up and ran, leaving the coast clear. The work of building the bridges now began. Details were made from the troops lying near to assist in carrying boats and plank.

Friday morning, the 12th, about 10 o'clock, General Freney at the head of our division, rode over and we marched into and took possession of the town, the rebels having withdrawn to the heights back of the town. We moved up as far as Caroline street where we filed to the right a short distance, halted, stacked arms. Orders were given to be ready to fall in at a moment's notice. Then commenced the ransacking of the town. The men were wild with hunger for something better than pork and hardtack. Tobacco, an article so much sought for, was found to be plenty. In all shapes, from the boxes of plug to the braided stick. It was indeed a laughable sight to see men carrying great boxes of tobacco through the streets on their heads and any way to carry them. One man of my company, having found some wine, brought all he could carry in a wash tub, and asked the boys up to have something at his expense.

I never shall forget an incident that occurred there at our company's quarters that afternoon. A comrade found a file of papers up in an old garret. Not having seen a paper in a long time, he thought it would be a good joke to go

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out and offer them for sale. No sooner thought of than out he goes with a good armful. "Baltimore Clipper, 10 cents apiece," rang out clear and strong. Officers and men flocked around eager to purchase, several purchasing before the fraud was discovered.

Spoils of the Victors.

The needless destruction of property was a surprise to me, who had been taught to take the greatest care to preserve. To see jewelry cast into the street, beautiful dwellings entered and furniture demolished, elegant carpets trampled with muddy feet, pianos thumped by the crowd was indeed a sacrilegious sight. As for myself, my ambition was to find something good to eat. Having found some flour and corn meal in a flour chest in somebody's well filled larder, I appropriated a portion—what I could conveniently carry. Going into the cellar of another house, I found a barrel of cut sugar. I took five or six pounds just to satisfy the hunger of my sweet tooth. Some were busy all night baking pies and biscuit. To use a common expression, we lived high.

Saturday morning dawned bright and crisp. About 10 o'clock, we were ordered to fall into line. We moved up into the next street and rested, standing or lying on either side of the street for an hour or more, when the first thing we knew a solid shot came down from the rebel battery upon Marcy's Heights, about three-quarters of a mile back of the town; the shot passing through a brick house, (by the side of which I was standing) not 10 feet above my head, struck on the sidewalk on the other side of the street wounding several. The first shot was succeeded by others, and the column began moving. In closing up we went on the double quick. The string by which my little bag of sugar was held gave out and I had to leave it where it fell. We hurried on, and upon reaching the railroad, fled to the right and along the depot where the shells were dropping continually, but on we pushed, leaving the railroad to the left. On we go up towards the old Ashery. When crossing a sluice, I noticed several men standing still looking at something. I halted a moment. A man lying there with both legs shot off just below the knees, who said as I came up, "Pass on boys. Don't stop to look at me." The carnage at this time was simply terrible. Upon reaching the Ashery, we halted a few moments, throwing ourselves flat on our faces. At this time we got separated from the rest of the brigade. Upon rising again we ran as fast as we could go for perhaps sixty or eighty rods under fire at every step. When passing an old house, I stopped long enough to take off my haversack, (which was hindering my locomotion) and slung it up against the house where I could find it again. On we go up to where our forces are lying behind a knoll. We were about thirty rods from the road running along the bottom of the heights where the rebel infantry were lying behind a stone wall. We took our place on the extreme left. From this point to the rebel skirmish line on our left across a level upon a hill was about eighty rods distant. We kept up a continual firing which prevented the enemy from concentrating theirs and obtaining a cross or enfilading fire upon us. Several charges were made during the day, but each failed to accomplish the desired result. About 2 o'clock our brigade was ordered from the field, but for some reason we failed to get the order, and we remained until dark. Some time in the afternoon I began to feel longings for my haversack. The more I thought about it, the more I wanted it. So, I asked the officer commanding my company if I could go and get it. He advised me not to go as I must cross a space of ten or fifteen rods directly under the enemy's fire. I determined to take the risk, and away I sped as fast as I could go. Whether I so much surprised the Johnnies they could not shoot or they were not expecting any such adventure, I cannot say. However, I reached the house in safety and found my treasure. Picking up the "grub bag," I started back. But this time they were ready for me and before I had reached half way, the bullets came zip zip, ping! but not being exactly in the way, was not hit. I pressed on and got back safe and sound.

Bullets and Bursting Shells.

Just after sunset I witnessed a scene long to be remembered. Some brigade had been sent to reinforce or relieve us at the front, and as they came up in line of battle with banners flying, great gaps were made in their ranks by bursting shell and whistling bullets. They close up their ranks again and on they come, still on. Now they halt. Look! See! they are going to fire, and they did let a volley into us. Our color bearer had

been negligent and had his colors furled, but now we were all awake to our danger and our colors were immediately unfurled and the firing ceased. It soon becoming dark, we left the field and found our way back to the city and our old quarters. Details were sent out during the night to bring in the dead and wounded. Sunday morning dawned clear and bright. The regiment fell into line and marched back to the bank of the river where we lay until Monday eve. All that Sabbath day we lay there expecting at any moment the opening of the rebel guns, but nothing disturbed the stillness save the occasional shot on the skirmish line or the chirping of the birds in the trees. Here and there were men to be seen with pencil and paper writing a few words home telling how the battle went or how some comrade gave his life for his country. All day Monday we hugged the river bank not being allowed to go up into the town. About 9 o'clock in the evening came the order to us "Move out quietly as possible," and in five minutes we were recrossing the river. "Thank God we are out of that trap" was the expression of many as we crossed the bridge and moved leisurely along back to our old camp.

The next morning a detail of fifty men from our regiment was sent down to our division hospital to bury the dead or wounded who died. I was one of the number. We dug a trench about three feet deep, six feet wide and forty or fifty long, wherein we placed them side by side, folded in their blankets. When all were ready to cover, a gentleman dressed in citizen's clothing stepped forward and said, "Men, let us not bury these men like the brute, but have a word of prayer and implore God's gracious care for their souls." From the lips of many came the response, Amen.

The reported loss of our forces was 10,000, but the actual loss was more than twice that number. Thus ended the great battle of Fredericksburg.

Our Vanishing Desert.

A quarter of a century ago, says the Baltimore "Sun," any mention of the great American desert called up visions of a region of limitless extent, sun-baked, parched and desolate. A country associated always with tales of suffering and death, of unfriendly savages and deadly reptiles, for years it was passed over by congress as worthless. The marvelous transformation which has been wrought in two decades in this land of silence and sunshine furnishes one of the most interesting and inspiring pages in the annals of our republic's development.

The great American desert is vanishing from the map. Its boundaries have shrunk and it no longer presents a formidable barrier to the growth and progress of the far west. Twelve million acres of this rainless country have been subdued by means of agriculture and irrigation and are producing bountiful and assured harvests every year. A quarter of a million families are residing on farms, and as many more have found homes and occupations in the cities, towns and villages which have sprung up in the midst of the agricultural areas.

Great dams have been constructed to impound the floods, and through 70,000 miles of canal and ditches the life-giving water has been turned upon the dusty desert. The streams have been harnessed for power, and an era of manufacturing is dawning in which all of the raw products of the farm, the forests and the mines will be prepared for the markets of the world. The comforts and luxuries heretofore unknown in agricultural regions already are obtainable in many of the western valleys. The farmer lights and heats his home with electricity, and his heavy work is done cheaply by the same potent force. Trolley lines bring the farm and town close together.—"Country Gentleman."

A Quaker's Way.—A young Quaker had been for some time casting diffident glances at a maiden of the same persuasion, while she, true to the tenets of her upbringing, had given him mighty little encouragement. However, one day the opportunity of placing the matter upon a more stable footing presented itself to Seth, and he shyly inquired: "Martha, dost thou love me?" "Why, Seth, we are commanded to love one another," quoth the maiden. "Ah, Martha, but dost thou feel what the world calls love?" "I hardly know what to tell thee, Seth. I have tried to bestow my love upon all, but I have sometimes thought thou wast getting more than thy share."—Detroit "Saturday Night."

"A hoary head is a crown of glory if it be found in the way of righteousness."—Prov. 16:31.



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Rubber Roofing

Warranted For Twenty-Five Years.
FREIGHT PAID To Any Station East of Rocky Mountain, except Texas, Colorado, New Mexico, N. Dakota, S. Dakota, Wyoming, Montana. Special prices to these states on request.

ONE-PLY Weighs 35 lbs., 108 Square Feet, \$1.10 per roll.
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N&W VIRGINIA FRUIT LANDS

\$15 to \$50 Per Acre

will buy land in the Beautiful Shenandoah Valley that will grow better fruit than can be grown on \$100 to \$300 land elsewhere.

CLOSE MARKETS and LOW FREIGHT RATES give us a great advantage. Fast freight shipments reach New York in 24 hours. Rate 10 cents per box on apples.

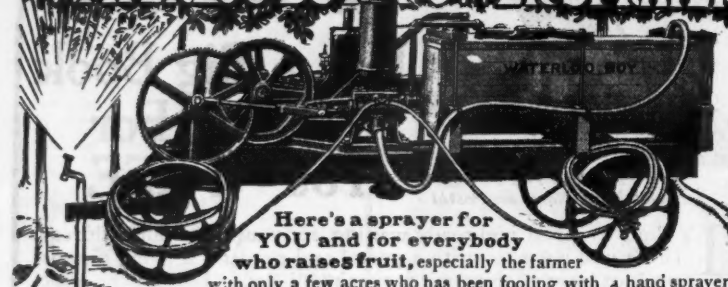
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You can grow apples here at lower cost because nature provides abundant rainfall, and our mild climate, rich soil, cold mountain water, good roads, good schools and best social environment make life very attractive to the new comer. Virginia harvested a \$3,000,000 apple crop in 1910. We have high grade apple lands in the Shenandoah Valley near railroad and towns at \$15 per acre and up in small tracts. Large boundaries as low as \$10 per acre.

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THE HIGH PRESSURE WATERLOO BOY POWER SPRAYER



Here's a sprayer for YOU and for everybody who raises fruit, especially the farmer

with only a few acres who has been fooling with a hand sprayer or not spraying at all because he "didn't believe a power sprayer would pay him." Whether you have two acres of fruit or a hundred—you need the

Waterloo Boy High Pressure Power Sprayer

The only question is what size you need.

The Waterloo Boy Power Sprayer delivers a mist-fine spray and puts it just where you want it, covers every leaf clear to the tree-tops. No dripping or wasting of the solution.

The pump is double acting and tested up to 300 pounds pressure. All parts exposed to the chemicals are solid brass or brass covered. Has pressure, gauge and automatic safety discharge back into the tank. All parts accessible and interchangeable.

Power is supplied by our world famous Waterloo Boy Gasoline Engine. Any size desired is furnished from 2 horse power up and every one carries our binding 5 Years Guarantee. It maintains a steady high pressure and feeds four leads of hose, or 2 leads with up to 4 nozzles each. Works as well on a hillside as on the level.

The outfit is mounted on wooden skids or on a low truck as desired.

The Waterloo Boy Power Sprayer is made just as carefully and of just as good material as the Waterloo Boy Gasoline Engine and we stand behind it just as squarely with our clean record of 18 years of success. We have a special sprayer proposition to make to every fruit grower, farmer, gardener, and orchardist. If you have any fruit or vegetables to spray, write for details at once—it will pay you big. Catalog free.

Waterloo Gasoline Engine Co.,

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Waterloo, Iowa.

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Can Your Own Vegetables, Fruits, Fresh Meats, Fish, Etc.



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The same regulation steam pressure boilers that are used in the large canning factories, only made on a smaller scale and adapted for the home or small factory use. Anyone with ordinary intelligence and our simple instructions can put up corn, peas, string beans, tomatoes, pumpkins, fruits and berries of all kinds, fresh meats, fish, etc., just as easily as boiling potatoes. These outfits will pay for themselves many times over the first year and will last a lifetime. In Europe these small canning factories have been in evidence 20 years and have nearly driven the big canner-

ies out of existence. In America they are fast becoming popular and will soon be to the vegetable and fruit districts what the cream separator is to the dairying sections.

Wanted! Agents and Dealers Big Profits For You.

A tremendous business is developing on these outfits and we are offering merchants, hardware dealers, nurserymen, fruit tree salesmen (as side line), farmer agents and others, big inducements to sell these outfits in their localities. They are money makers and every fruit grower and farmer's wife wants one.

"Secrets of the Canning Business" and our 1911 Catalog. Both Free

Send for them today. Our 1911 Catalog describes our entire line and tells just how to figure the profits yourself. Where we have no agent or dealer we will allow you agent's discount as an introductory price for the first outfit in each neighborhood. Write now.

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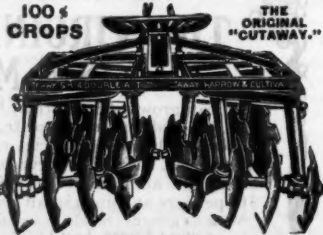
The package advertises and sells the fruit. Let us send you catalog showing the superiority of packages we are manufacturing. 26 years at it, we know the requirements, and we want you to know our prices. We make mixed shipments. Join your neighbors in carload lot shipments, and save freight. Prompt shipments at all times. Address nearest office.

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CUTAWAY HARROW COMPANY 865 Main Street, Higganum, Conn.

PRIZE STORY CONTEST NO. 5.

Continued from page 13.

matures, and if suitable for lumber, it should be hauled to the saw mill, if not then worked up into stove wood. Some trees should be pruned a little, that they may grow into more useful timber, while others of bad shape or where too thick, will need to be cut out, to give other trees a better chance to grow; this will need to be attended to annually, rather than to make a wholesale job of it all at one time; and these limbs and thinnings should, of course, all find their way to the kitchen wood-pile.

In cutting out large trees try to avoid all damage so far as possible to the younger growth and it is best to not have too many wagon or sled roads, but skid the stuff out to some central road with one horse. The young growth that we wish to protect should be given every possible chance to grow. Livestock should be excluded, as it will do a great deal of damage, even in a short time, to a young growth.

In most of these farm woodlots will be found some open places where it will be advisable to transplant a few trees; and white pine will be found a good variety for this purpose. Perhaps there is nothing better. The farm woodlot is a part of the farm that deserves a great deal of study. It is a problem for the farmer to turn over in his mind frequently and look at the situation from all sides and the more he thinks about it the more he will become interested in it and the more fully convinced of its importance.

It is a great convenience to be able to cut fire wood and building timber on one's own farm; this the writer has always been able to do, and he has trees large enough for saw logs, that he planted.

Editor's Note.—It will be decided later which articles are entitled to the prizes offered.

Planting the Fruit Garden.

Written for Green's Fruit Grower by M. Roberts Conover.

A favorable spot for the fruit garden is a gentle slope or a level area of well-drained, well-enriched soil, loamy in consistency and its greater part exposed to the sun. If possible, give the soil a heavy dressing of unleached hen or stable manure at the rate of ten tons to the acre. The soil should be worked very deep with the plow and then pulverized with a harrow until as fine as for seed planting.

In a garden where the ground slopes, peaches, plums and grapes should occupy the higher ground and the small fruits the lower. Warm, dry rather sandy soil is very favorable to the peach while currants and gooseberries delight in the cool, moist earth in the partial shade of a wall or fence.

Raspberries require richer soil and more shade than the blackberry, which is less exacting as to location than any other of the small fruits.

Grapes will not ripen well on heavy wet soils. One must have this in mind when choosing the location. They will do well on a knoll or any well-drained loam.

For planting select healthy, one-year-old stock of good size. Healthy young trees and bushes have smooth bark, free from scale or traces of disease, and the wood beneath the bark is full and firm. A coating with California wash—a preparation of lime, sulphur and salt, will insure freedom from the San Jose scale.

The best blackberry plants for planting are those grown from cuttings well-rooted and vigorous—not from sprouts or suckers.

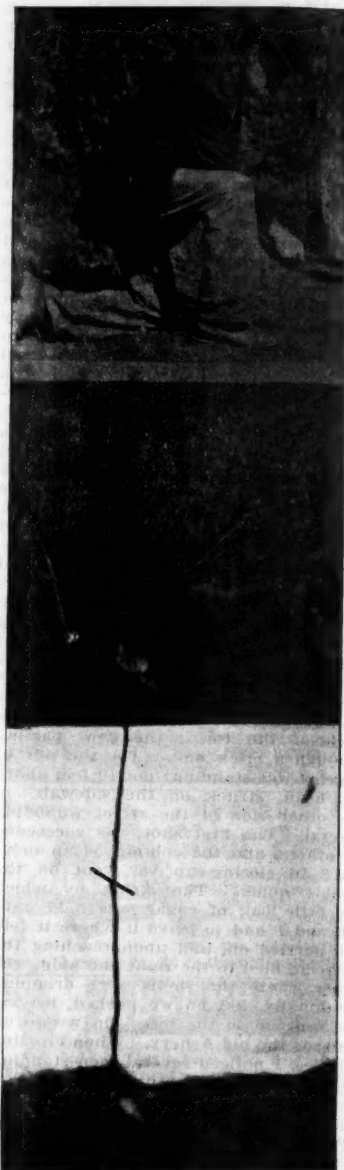
Choose a damp cloudy day in April for setting so that the delicate root fibers do not dry out before being planted.

The proper distance between mature trees and bushes is determined not only by the size of the tree above ground but by the extent of root area. Too close planting will result ultimately in a deadlock, each plant warring against its neighbor for its share of moisture and sunlight.

Currants should be planted about four feet apart in rows four feet apart. Gooseberries, three feet apart in rows four feet distant. Blackberries, four feet apart in rows six feet apart, and raspberries about the same. Grape vines should not be closer than fifteen feet in rows ten feet apart, and peaches and plums from eighteen to twenty feet apart in rows twenty-four feet apart.

It is a very good plan to alternate the apple and peach trees. When the peaches have served their purpose the apples are ready for bearing.

The subsequent growth of plants depends upon a reasonable cutting back of the root and top so that there will be



The upper picture shows the writer at work in his garden. The other two show how to properly prune a plant when setting it out in the spring of the year. The cross mark shows where you should cut it off in the lower view.

a harmony of action between these sources of growth.

The one-year-old grapes are cut back to three buds, the lower bud being set underground to reinforce the root system.

Blackberry, raspberry and other small fruits should have at the planting the tops cut back to a few inches above the soil and each root branch shortened to two-thirds of the length.

One-year-old peach and other trees are trimmed back to whips two and one-half feet long and having several healthy buds. All mangled or broken parts of the roots are cut sharply off. This trimming of the root induces a new growth of fibrous roots from the point of cutting.

The plants whether from tree or shrub fruits must be set in holes broad enough to allow a natural spread of the roots. The plants should be set well down bringing them two or three inches lower than in their previous location. Rich, well-pulverized top soil should be filled in and pressed about the roots.

In setting strawberry plants, choose level or slightly rolling ground where the soil is a rich loam. Set rank-growing varieties eighteen inches apart. The weaker growing sorts may be twelve inches apart in rows three to four feet apart. Be careful that the center or crown of the plant is not covered. A handful of bone dust or nitrate of soda about each plant is very helpful.

In gardens where space is limited, the smaller fruits as currants, gooseberries, raspberries, and blackberries may be planted between the rows of trees or grape vines to be removed when the trees and vines have come into full bearing. After that, two crops cannot be successfully taken off the same ground unless the soil contains double the amount of plant food required for one crop. If the soil is not very rich this extra plant food must be given in applications of fertilizers containing potash and phosphate.

A horse that is thirsty all night will lose in condition, as compared with one watered frequently, and the last thing at night.

Spring is Here.

Written for Green's Fruit Grower by Katharine Lunsberry.

There's a twitter of birds, midst the branches and leaves,
And a soft whirr of wings from the moss covered eaves;
From out the old orchard an answering hum,
All joyously telling that spring time has come.

And high up above in the old maple tree,
Is a dear little nest, just as snug as can be.

A proud little mother hops gaily around,
To seek for her birdlings, fat worms from the ground.

Within the old forests, so dark and so dim,
Where winter, but lately, has reigned stern and grim;
The frail little flowers their heads proudly rear,
As if to each passer-by offering cheer.

There's a warmth in the air and a blue in the sky,
That no other season could have should it try.
And everything tells us to cast away fear,
For winter's departed, and spring time is here.

A Pioneer in New Hampshire's Coming Industry.

Written for Green's Fruit Grower by A. G. Symonds, N. H.

New Hampshire is destined to become one of the leading apple producing states. There is evidence of this on every hand. The apple industry is in its infancy in the Granite state, but it is rapidly growing and its future in the immediate years to follow cannot be measured. Never before in the history of the state has there been so much interest shown in orcharding. Nothing gave it greater impetus than the New England apple show held in Boston in the fall of 1909. Some of the most coveted prizes were captured by New Hampshire apple growers.

Among the winners was John T. Moore who won the first prize on a barrel of Rhode Island Greenings. No one who has ever talked fruit raising twenty minutes with Mr. Moore will dispute the fact that he knows apple culture from A to Z. The writer visited Mr. Moore's farm for the purpose of learning his ideas and methods.

Mr. Moore's farm is located in the town of Boscawen, N. H., and embraces one hundred acres. Seven years ago when Mr. Moore purchased it this was abandoned. Since that time he has practically converted the entire farm into one vast orchard now numbering close to 3000 trees.

The buildings consist of a substantial two story house, seventy-foot barn and outbuildings. The land is about 1900 feet above sea level and part slopes to the east, part to the west. The soil is black loam with a hard pan beneath it that holds the moisture, making it almost ideal for apple culture. Part of the farm has an iron stone ledge beneath it. It is believed that iron in the soil has its effect in coloring the fruit. A never failing spring bubbles out of the earth near the highest point of the farm and a brook, with its source from another spring, furnishes opportunity, if need be, of irrigating or supplying water to the trees during seasons of severe drought.

The original orchard which stood on the farm when Mr. Moore purchased it consists of 200 Rhode Island Greenings, 150 Baldwins. No better evidence of what proper pruning, spraying, cultivating and fertilizing will do can be shown than the orchard as it was seven years ago and as it is to-day. The trees are comparatively low with long branches extending sideways and in July, 1910, so loaded with fruit that many limbs will need support before harvest time arrives. This orchard has been cultivated for several years and this year is producing a crop of corn. The foliage of the apple trees is luxuriant and dark green and the growth this year on some trees ranging from two to three feet but averaging about one foot of new growth. The age of these trees is twenty-seven years while some of the Baldwins are about seventy-five years from grafts. The neighboring farmers laughed at Mr. Moore who came from Boston when he trimmed the old orchard and started to rehabilitate it. Now they are coming around to congratulate him and get his recipe how to restore lost youth to old orchards.

Fertilizing, plowing, planting, cultivating, hoeing, and raising a crop among the trees is one way of making an old or a new orchard produce results. Another way is to raise pigs in the orchard, allowing them to root among the trees. Still another way is the application of manure around the trees, hen manure being considered the best, also mulching with hay. All these methods have proved successful on Mr. Moore's farm.

It is surprising to note how among the Baldwin trees he has been able to

make them "come back" after years of neglect. In some instances the heart of the tree having decayed leaving a mere shell connecting with the roots. I scanned this old orchard of Greenings and Baldwins carefully and failed to find a single tree but that the branches hung full of fruit.

Mr. Moore is a pioneer in the idea of spraying and was one of the first to practice it in this state. He believes in applying the following mixture: Three pounds arsenate of lead, three pounds blue stone, five pounds lime to fifty gallons of water to his trees just as soon as the blossoms fall off. As the result of this application no moth, or pest, or rust affects the leaves or fruit and the foliage remains on the trees three weeks longer than upon trees not sprayed. Observation proves that as soon as the leaves commence to turn yellow and fall, the fruit will also drop, therefore, sprayed trees will hold and mature their fruit better than those not thus treated.

Different Kinds of Manure.

The relative value of manure, placed around the trees as observed by experiments ranks as follows: hens, hogs, sheep, cattle, horses. A hay mulch six inches deep is almost equal to stable manure and cultivation. To obtain color in its deepest and richest aspect wood ashes applied around the trees in late fall or early spring will produce the desired effect. Among animals allowed in the apple orchard hens, hogs, sheep are almost invaluable in the benefit rendered both to growth and fruitfulness. The hogs will root up the sod and earth thus keeping it stirred so that it will better hold the moisture as well as fertilizing the trees and eating the early drop apples. Young tree trunks must be protected by wire netting against destruction by the hogs if old hogs are allowed in the orchard. Spring pigs until four months old are better. Hens will devour innumerable bugs and insects as well as fertilize the trees and with a heavy mulch produce excellent results. Sheep will keep down the suckers on the trunk of the tree, keep the grass gnawed down around the tree and benefit an orchard in many ways.

Among the young orchard on Mr. Moore's farm are 100 Northern Spy, 200 Sutton Beauty, 25 Gravenstein, 200 Red Mackintosh, 200 Snow, the balance of 1600 Baldwin. These trees have all been set out within the last three years. They were planted in the fields and pasture in the grass. No fertilizer has been spread around them, but each year they have been mulched with hay. This works admirably keeping the grass down and the soil moist around the tree.

Too much or too little cultivation Mr. Moore thinks injurious to an orchard. Too much cultivation over-stimulates, while too little impairs the growth. He believes in the trees making a normal, substantial growth each season. He does not believe in forcing the growth as it is apt to prove injurious in the end.

This young orchard when visited by the writer had withstood two seasons of severe drought and three weeks without rain the third year and the foliage looked healthy, dark green, and luxuriant. The growth measured on a number of the trees averaged up to twenty inches (this on July 29th). The trees are set in rows diagonally thirty by thirty feet and as one views the smooth gently sloping fields with their regular rows of apple trees, he pictures in his mind the full grown orchard of a future day loaded with its ruby harvest.

One's imagination goes further and pictures fields, as far as the eye can reach, covered with orchards, the pride of every farmer, the leading industry of the state, the hope and promise of every farm.

Mr. Moore is demonstrating what can be done to make New Hampshire farms more profitable. His example is being followed by others who with him are only pioneers in the great industry that is steadily increasing within the borders of the old Granite state.

Odd.

That we should speak of wading through a dry book.

That a fellow can be in a girl's presence and yet be "gone."

That the more we think of some people the less we think of them.

That we often speak of folks being at odds when they are really trying to get even.

That the more people we get to help us keep a secret, the sooner it gets away from us.

That saying a man is "capable of anything" is a very different thing from recommending him as thoroughly capable.—Boston "Transcript."

Spray for the Codling Moth Now

JUST after the majority of the bloom petals have fallen is the time to spray for the Codling Moth. At this time the eggs have hatched and the caterpillars are heading for the calyx end of the tiny fruit preparatory to an entrance from that point. A thorough spraying fills the calyx cup, protecting the fruit and poisoning the insects, which feed at this point. The best insecticide,

SHERWIN-WILLIAMS**NEW PROCESS ARSENATE OF LEAD**

will accomplish most satisfying results. This product is not an acid arsenic preparation, but a thoroughly neutralized paste formed of Arsenic Oxide and Lead. It contains no free arsenic and therefore cannot burn the most delicate foliage. It is flocculent, stays well in suspension and throws an even and poisonous spray. One spraying adheres in a poisonous form to the foliage for months, which makes it very economical. The color and appearance of foliage and fruit are also improved by spraying.

Write for prices on your Spring requirements.

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This 120-page book, "Spraying—a Profitable Investment," sent FREE on request.

**BAND YOUR TREES WITH TREE TANGLEFOOT**

A harmless sticky substance. Applied directly to tree trunks. Remains effective (rain or shine, warm or cool) three months and longer, fully exposed to weather. One pound makes 8 to 9 lineal feet of band. No apparatus required, easily applied with wooden paddle. No mixing, always ready for use. Especially recommended against canker worms, climbing cut worms, bag worms, gypsy, brown-tail or tussock moth caterpillars, although equally effective against any climbing pest. Don't wait until you see the insects—band your trees early.

Price—1 lb. cans, 30 cents; 5 lb. cans, 85 cents; 10 lb. cans, \$2.65; 20 lb. cans, \$4.80.

Send for Booklet.

THE O. & W. THUM COMPANY, GRAND RAPIDS, MICH.
Manufacturers of Tanglefoot Fly Paper and Tree Tanglefoot.

140,000 Apple Trees for Sale

Also big stock of Peach, Pear, Cherry, Plum and Quince trees. Ornamental trees, plants and vines. Apple trees are in great demand and in short supply all over the country. Order early to get what you want.

Reasons for buying of Green: His trees are of high quality and true to name. You save agents' profits and expenses or nearly half your money by buying the new way, direct of Green. Green's trees are hardy, North-grown, free from scale. Green has a national reputation for fair dealing.

Get "Green's Book on Fruit Culture," Free. Tells how to buy trees, when and how to plant them, and how to care for your orchard after it is set out. Most valuable book of its kind for fruit growers ever published. Also ask for our big, Free 1911 Catalog. Established 30 years. Capital \$100,000.

GREEN'S NURSERY CO., 91 WALL ST., ROCHESTER, N. Y.



Farmer says to tree agent, "No sir, you can't sell me trees at \$1 each when I can buy better ones of Green's Nursery Co. for 25 cts."

POWER NOVO SPRAYER

3 Sizes—NOVO Jr.; 2½ and 3½ H.P.

Consists of perfectly standardized NOVO Gasoline Engine and standard pump on strong yet light-weight foundation. Speed reduction by strong cut gears.

Engine quickly detachable from sprayer—for use in other farm work. Its light weight makes it readily portable.

FREE BOOK—"How to Spray"

Prof. Taft of Michigan Agricultural College writes "Up-To-Date Spraying." It's free upon request.

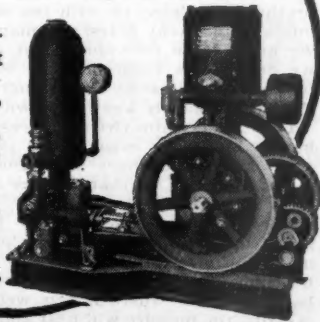
NO TANK
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NO FREEZING

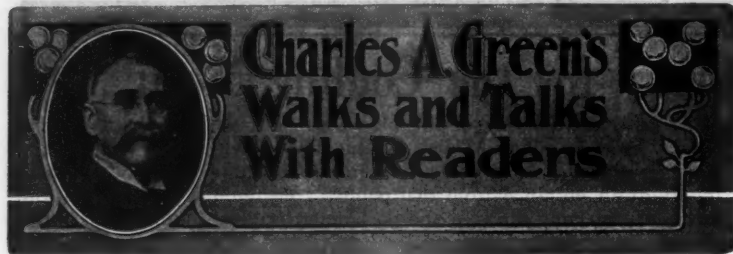
HILDRETH MFG. CO.

C. E. BEMENT, Sec. and Gen. Mgr.

135 Willow Street,

LANSING, MICH.





ROCHESTER, N. Y., APRIL, 1911.

Wise men will protect birds, knowing them to be his friends.

If all the birds were killed mankind would disappear from the earth from starvation for the insects would eat up every green thing. If you must keep a gun on the farm keep it for protection against tramps and not to kill the beautiful and helpful birds.

Teach your children that birds are helpful. Interest your children in bird scenes and bird life. We become nobler with higher inspirations through noble thoughts and through study of God's creatures and his universe. To be ignorant is to be heavy eyed, heavy jawed, unhappy and superstitious.

In the south where our song birds spend the winter they are slaughtered by southerners, by seemingly intelligent men, who ignorantly take pride in their slaughter. The south is progressing in many ways, but not in the protection of bird life.

How wonderful is the chemistry of nature. Different trees feeding upon the same soil and the same air will produce different products. The oak gives the acorn while another tree gives us oranges, another apples, another pears, peaches, plums. How marvelous is nature.

The Hippopotamus and Rhinoceros.—These animals furnish tons of flesh, which is said to be good for human food. Thus it has been proposed to introduce them in the southern portions of this country, where it is thought they can sustain themselves on wastes in marshes and bayous. Other African animals are suggested for introduction.

Success.—Good fortune, good luck are words often heard in connection with success in life, but in fact there is scarcely such a thing as good fortune or good luck for the most of us. Nothing ever happens. There is a cause for everything. When we speak of good fortune or good luck we usually refer to the achievement of some industrious, self sacrificing, prudent person.

Talk.—It may be said of some people that they cannot cease speaking. There are people gifted with gab to a remarkable degree. They have a flow of language which is overpowering to the possessor and often distracting to the hearer. A noted president of a large university once said that he ever had fears that his gift for talking might lead him to excess of talking. Short letters, short sermons, short articles for publication are more readable than those lengthened to wearisomeness.

Fruits on Mountain Sides.—We are often asked whether orchard trees and small fruits can be planted on the mountain side. While moderate elevations consisting of a few hundred feet are advantageous for fruit growing, a much higher elevation would result in danger from frost and should be avoided. I have no personal experience in planting on mountain sides. I should want to experiment with the temperature there at different stages before planting extensively.

"The Proper Study of Mankind is Man."—It is true that we really do not know any human being. If we are asked if we know Mr. Jones, Mr. Smith or Mr. Bailey we may say that we know him, but in fact we know but little of our friends or of our relatives. We may have lived with father and mother, brother and sister, or with the wife or husband for many years, and may think we know these individuals, but in fact we only know them in part. Strange to relate we hardly know ourselves. That is we hardly know how we would act under certain circumstances. We hardly know our capacity for good or evil. Most of us have more good and more of evil in us than we are aware.

Hen Manure.—Almost every farmer and fruit grower keeps hens but few make the most of the cleanings of the hen house. If this manure is placed in barrels outside where it gets wet occasionally, the manure will heat and much

of its value will be lost. If layers of earth are placed between layers of manure in the barrel and kept protected from storms the value of the manure will be preserved. The sooner it can be applied to the soil the better. It should be pulverized; sometimes we scatter it on the barn floor and pound it with a flail, then mix it with muck for if not thus mixed it is apt to be applied too freely. Use great care as it is a very strong fertilizer, perhaps ten times more so than ordinary stable manure for there is apt to be less litter with it.

What to Do with an Old Berry Plantation.—W. T. Brown, of Wisconsin, asks what fertilizer he should apply to a four year old red and black raspberry plantation, which has not been productive. The plantation is full of weeds and grass. He has an old strawberry bed three years old. What fertilizer should he apply to that?

C. A. Green's reply: I do not consider a four year old raspberry plantation, that has been neglected, worth bothering with. If it were mine I should be inclined to cut out the canes and plow the land and plant it to some other crop. The same is true of the three year old strawberry bed that has been neglected. Nevertheless a heavy application of barn-yard manure, or an application of 500 pounds of nitrate of soda per acre, would be helpful to both the old raspberry and strawberry plantations.

The United States government is doing something to protect bird life, having set aside certain tracts of land in different states, where no bird is allowed to be killed during any season of the year. Here wild birds, wild duck, gulls, etc., become so tamed as to eat from your hand. But this is slight protection for them against the hundred of thousands of thoughtless ignorant foreigners and those native born who know no better than to shoot birds and destroy their nests.

How much time is required to educate people along any particular line. This is my thought when I consider the decoration of women's hats with the plumage and bodies of dead birds. We would assume that a tender hearted woman would be the first to ask for reform on this subject. Thoughtlessness is the great obstacle in the way of bird protection.

The Cave Man.—Man in the early ages lived much like a wild beast. Sometimes his nest was built in the branches of a tree, at other times against precipitous mountain or hillside, and at other times he made his home in caves, seeking protection from savage beasts. While a cave does not make a comfortable house, as there is apt to be no ventilation, no chimney, and it is usually very damp, man has continued to the present day to make his house dark and poorly ventilated, after the original idea of a cave home. No house can be a healthy abode which has not ample windows to let in the light, the sunshine and fresh air. But even when there are abundant windows the housewife is inclined to the original cave idea, as is shown by darkening the windows with heavy shades or curtains. Never mind if the sunshine does fade the carpet or the furniture, let in the sunshine freely, believing that it is the cheapest medicine provided for man.

Grapes.—I am asked how much fruit a fully developed grape vine will yield each year. My reply is that much will depend upon the variety. The Concord, Worden and Niagara grapes are heavy yielders in this locality. I have Worden and Niagara grape vines near my house which average about one bushel of fruit per vine each year. I have a vine of the Green Mountain grape climbing up the telephone pole which does not yield over one-half a bushel of fruit. I do not think the average yield of the most productive vines in the vineyards of this state would equal a bushel per vine. Much depends upon the method of pruning. The vineyardist prunes in

a way to secure the finest clusters rather than the largest number of pounds of grapes. In southern localities there are grape vines possibly one hundred years old, each vine covering a large area of land. It has been claimed that one of these old grape vines has yielded in one season more than one ton of grapes.

C. A. Green's reply to farmer in city: Men do not consider themselves old at 70 years in these days. If you do not live to see your orchard bear fruit you will live to see your farm made more profitable, more valuable, more salable, owing to the fact that you have trees planted on the land. Nothing makes a farm more salable than a promising orchard.

The trumpet vine will throw out rootlets and cling to a shingle roof. I think Ampelopsis Veitchii will also cling to the shingles. A grape vine might throw out its tendrils beneath the shingles and sustain itself to the roof.

You have done a fine thing for your boys in giving them such a complete education. I trust they will appreciate how much you have sacrificed for their welfare. I realize how natural it is for you to desire to get back to the farm after a few years of city life. I went through this same experience many years ago. I left the farm to go into the banking business in a large city where I remained fifteen years. At the end of that time nothing would please me so well as to get back to the farm. So back I went.

No Water on Strawberry Plants.—The first thing that an inexperienced man feels like doing after receiving by express from a distant nursery a package of strawberry plants is to pour water over the foliage. This is the worst thing that the fruit grower can possibly do. Strawberries tied in small bundles and packed in baskets or boxes should never have the foliage wet or even moist with water. If water is applied under such conditions the crowns of the plants will rot and perish. If strawberries are received by express in a dried condition, do not allow a particle of water to touch the leaves or the crowns of the plants, but dip the lower portion of the roots in warmish water and then place them back again as they were before unpacked. Strawberry plants dry out very quickly if left exposed to the sun and wind, therefore when planting them, place the package of strawberries in a pail with a few inches of water in it. This permits the roots of the plants to be continually in the moisture. Never drop the strawberries along the row in advance of the planter when planting, but simply take one at a time out of the pail.

Cement on the Farm.—Are you using Portland cement? If you have not found how valuable this cement is and in how many ways it can be used on the farm, you should learn at once. Learn how to make a solid block of stone by mixing cement with gravel, sand and field stones. At Green's fruit farm we are no longer compelled to hire a mason to build foundations, walls for houses or other buildings. We simply dig the cellar, board up inside of the excavation, leaving fifteen inches between the board partition and the earth bank, then throw in a layer of field stone of any size. Over this we spread a layer of cement made of Portland cement one part, and coarse sand and gravel mixed four to five parts. On this while yet soft we place another layer of stone and thus proceed until the whole cellar wall is completed. You should know how to make a fence post, a horse block or a stone roller out of cement, and hundreds of other useful things about a farm, such as walks, cisterns, watering troughs, etc. Cement will keep for years if in a dry place. If it is in a damp place and gets lumpy this is evidence of deterioration.

A Bad Habit.—The habit of breaking in with talk before a companion has finished his remarks is growing in America. When we are pressed with an idea we cannot wait for the other fellow to finish his remarks, so we break in with our own talk without even an apology. While such conduct is evidence of lack of culture and a dearth of appreciation of what our companions are saying, this habit is practiced by people whose training should have taught them better. To cut short the conversation of a friend or companion, to make remarks of our own shows that we have no regard for what our companion is saying or for his opinions, but that we have a high regard for our own talk and desire at any cost to make ourselves heard at the expense of our companion. And yet I do not think that this discourtesy is intended in

many instances. We are simply impatient to get in our remarks and cannot wait for the other person to finish his remarks before we begin. The question is what shall we do with the individual who breaks into our conversation? One way is to continue our conversation, no matter how much some one else tries to interrupt. Another way if the matter has become burdensome is to stop short and remain silent for a long time, allowing the interrupter the entire field of conversation.

Ben Burdett Orchard.—Near Rochester, N. Y., is an orchard not exceeding six acres which has the reputation of producing the finest fruit and the largest crops annually of any orchard in this locality. Mr. Burdett, the owner, has taken many prizes at the horticultural exhibits and his fruit has attracted much attention. I saw him today and asked for the secret of his success. His answer was "I do not know." He said he never has plowed or cultivated his orchard. He sprays thoroughly at the proper time, and prunes carefully. He enriches his orchard with barn yard manure as often as possible and pastures it. He is of the opinion that the soil in this little orchard is peculiarly adapted to apples. It is not on an elevated site as we might expect, but is on rather low land. Mr. Burdett to-day brought me a barrel of Fameuse (Snow apples). I have at Green's fruit farm one tree of Fameuse which seldom fails to bear a full crop of beautiful fruit, but this year it bore nothing. It is one of my favorite apples for eating out of hand being tender of flesh and agreeable in flavor. Tenderness of flesh in an apple is very desirable. No matter how well flavored an apple may be if its flesh is not tender it cannot be my favorite. I find in the Spitzenberg an apple that as generally grown has not tender flesh but it is of high quality. Therefore when I look for an apple to eat I do not pick out the Spitzenberg. I paid Mr. Burdett nearly \$5 for the barrel of apples. I was glad to get them at any price.

A lady subscriber at Victory Mills, N. Y., writes me that she has a small farm which she has bought principally with the idea of keeping poultry. It is a run down farm of forty acres sixteen miles from Schenectady and fourteen miles from Saratoga Springs. She has determined to set ten acres of this farm to fruit, principally apples. She writes for advice.

C. A. Green's reply: Your locality is more desirable for growing small fruits than large fruits. There is a great opportunity for anyone within twenty-five miles of Saratoga Springs, Glens Falls, N. Y., or Schenectady to grow the strawberry, blackberry, raspberry, currant and other similar small fruits. I found that fruit dealers at Glens Falls, N. Y., have been compelled to send to Rochester, N. Y., for supplies of strawberries and other small fruits which might be grown successfully and profitably by some one who owns land near by. There is this in favor of growing small fruits; the plants bear fruit much sooner than orchard trees and there is a continuous income from the time strawberries are ripe in June until autumn, if a few grapes are grown. Strawberries are followed by raspberries, then comes blackberries, then currants, and soon after that grapes. This enables the same force of hired help to be kept continually working at one fruit after another. But I advise all inquiring friends, and particularly this lady, to begin in a small way, thus gaining experience. Do not think of planting more than one acre all told the first year, dividing it between a little plantation of strawberries, a few blackberries, black and red raspberries and currants. You will gain as much experience by planting this acre or even less than an acre than you would if you planted more largely. You will be surprised at the amount of money you receive from an acre thus divided among the various small fruits. The next year and succeeding years you will be able to increase your plantation by the increase of your own plants particularly the strawberry and the raspberry. My book which I mail you, "How I Made the Old Farm Pay," tells you how to propagate all these small fruits as well as large fruits.

In addition to this one acre plantation of small fruits, if you feel able to do so, plant an acre dividing it among apples, peaches and pears. I consider it proper to advise all beginners to start in a small way at the start in order to gain experience. I am confident I am acting the part of a friend in giving this advice. Leave the large plantations for men who have had large experience and know just what they are going to undertake and what their chances are for success or failure.

Our Editor's Rest Journey.

Believing that a few days rest is a good thing for a hard working man, I took the New York Central railway train for New York city recently. I enjoyed the scenery, being a lover of nature. I noticed the change from summer, green pasture and woodland, to snow clad hills and leafless woodlands. I always get a feast of beauty along the Mohawk river, which skirts the railway. Water is a mirror, reflecting the sky with its brilliant colors. Now the river would appear as black as ink, then it would seem to be full of melted silver, then again full of molten gold, in strange contrast with the snow, patches of ice, and with the leafless trees.

We passed down the banks of the Hudson river when the sun was sinking behind the Catskill mountains, which rose black and dismal. Here was a scene worth going hundreds of miles to see, yet the passengers in my car paid no attention to the beautiful scenery surrounding them, but were engaged in playing cards and reading magazine stories. The river was frozen and covered with snow. The trees on the banks and hills were seemingly dead. All this, with the black and distant mountains, in marked contrast with the brilliancy of the sky, made one of the most beautiful scenes I have observed for many years. The sky is one of the most beautiful objects of nature, and the streams and rivers, being mirrors reflecting the sky, are nearly as beautiful.

Artists have helped me much in learning to appreciate the beautiful fields, forests, sky and river. The artist sees much more beauty than the average man. Thus the artist through his paintings can teach us how to find new beauties in the ever changing scenes of nature. Thus art is a means of culture. The man who can enjoy seeing daily a beautiful painting will learn to get far more enjoyment in his life than the man who cannot appreciate a beautiful work of art.

The art of painting is a language. When a man has learned how to draw and paint he has simply learned the language of his art. After that he must learn the more important part, which is how to express himself, how to unfold to others the beauties and thoughts suggested by nature.

Painting a Saint.—A widow once called upon an artist and asked if he would paint a portrait of her husband.

"Yes," the artist replied, "when can I have a sitting by your husband?"

"You cannot see my husband while painting his portrait because he is dead."

"How can I paint a portrait of your husband if I have never seen him?" asked the artist.

"Why, you paint portraits of the saints."

"Yes," replied the artist.

"But you have never seen the saints. If you can paint a portrait of the saints without seeing them, you can paint a portrait of my husband without seeing him, because he is a saint."

The artist finished the portrait. On delivering it to the widow, she exclaimed with uplifted hands, "How wonderfully he has changed, I would not recognize him since he has become a saint."

Possibly I was more than usually interested in this beautiful scene for the reason that my mission to the big city was to inspect an oil painting representing a sunset back of the Palisades on the Hudson river opposite Yonkers.

After seeing many attractions in New York city and Brooklyn and spending a day with an artist friend, after passing dry shod under the water and mud of the East river into Brooklyn, and passing under the Hudson river by railroad tunnel, I visited a marvelous art exhibition at Philadelphia, and then took a train for home, being absent four days.

I always feel refreshed after a little trip of this kind. We should all attempt to put variety into our lives.

Variety is the spice of life. A change even for the worse is restful. It is the daily grind of routine work which wears us out, and which leads many to the lunatic asylum. We can endure much work if we can be diverted by change of scene, by innocent games, or short journeys.

At my hotel on Broadway in New York I received experience in hotel life. This hotel is occupied mostly by New York men, their wives and children. You may think that this kind of life is better than the kind you are living but I do not think such is often the case. The lady boarders of this hotel are for the most part idle and idleness is vicious. But these people are well cared for, surrounded with delicacies to eat and drink. A band of musicians

plays music while these people eat turkey and cranberry sauce. I would much rather live on the farm than live in a big city like New York. This place is noisy night and day. The conditions are not such as promote long life. Some of these rich New Yorkers love to talk of a fruit farm which they have purchased. So you see that retirement on the farm is the dream of many sensible city people.

He Lost Forty Thousand Dollars.—A gentleman seated near by at dinner, related to his friends the following experience:

"I have just lost forty thousand dollars."

"How did you lose it?"

"I invested forty thousand dollars in Mexican land."

"Is there no chance of getting back any of this large sum of money?"

"Possibly I may get thirty-five thousand dollars, after a long lapse of time, but think of the interest I will lose."

"Did you buy the land without seeing it as many foolish men do?"

"No, I went to Mexico and saw just what I was buying. Mexico is a wonderful but undeveloped country. The forests there are filled with trees of the most valuable timber including mahogany. The soil is productive. I invested my money in timbered land."

"Is there no railroad near by?"

"No, that is the trouble with my investment of forty thousand dollars. There is no way to get the lumber to market. I must wait until railroads are built. I was surprised to find many parts of Mexico so wild, wooded and undeveloped."

"A friend went to Mexico and bought a gold mine claim. Then he had to build at his own expense a railroad leading to the gold mine. His eastern friends put stock in this gold mine, but all of the management was left with my friend, the president. Therefore he has a big job on hand continually. He lives in Philadelphia, but is obliged to go to Mexico twice a year to look after his property. While there is plenty of gold in this mine the last I heard was that not much money had been made out of it."

"My land is located in a tract so wild that I could have killed a wagon load of crocodiles, and many wagon loads of wild ducks, with but little trouble. The streams and lakes were filled with wild ducks and other game."

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EDITORIALS CONTINUED.

Electric Power on the Farm.—Every farmer should be wide awake in regard to new inventions and new methods. The windmill and the gasoline motor have done marvelous work for the farmer. Now we have offered us electric power. At the completion of the big dam on Genesee river at Portage Falls electric power will be possible to many thousands of farmers. This power can be used for pumping water for irrigation purposes. The time has come when farmers, gardeners and fruit growers should pay more attention to irrigation. Western men who do not attempt to grow crops without irrigation wonder how it is that eastern farmers make no attempt to irrigate their fields, thus being able to produce more on ten acres than is ordinarily produced on one hundred acres.

A fruit grower near Rochester has for several years been using a gasoline engine for pumping water to irrigate his peach orchard with remarkable results in size, yield and profit of his peach crop.

Kevitt's System of Growing Strawberries.

There are many ways of doing almost everything. There are many ways of growing corn, potatoes, wheat, oats, and other farm products. These methods of difference may vary in expense and the amount of labor expended and the amount of fertilizing applied. The final result is somewhat in proportion and the amount invested in labor in fertilizing. Mr. Kevitt says that he produces over 50,285 quarts of strawberries from one acre. The number of plants per acre was 33,795.

If I were to ask you, a strawberry grower, how many plants you had on an acre of strawberries you would be unable to tell. The number would be so great that you could scarcely count them.

Mr. Kevitt is not satisfied to grow and harvest marvelous crops of strawberries. He must secure the largest and best berries, which he is able to sell at double price of ordinary berries. Probably he could not afford to grow strawberries by his system and sell fruit at the ordinary price at which strawberries are sold.

Mr. Kevitt has no matted rows of strawberries. He says that where the

plants are allowed to take root with each other, that they are injured as though weeds were growing there. His soil is carefully prepared and fertilized. Then he sets his plants one foot apart each way and allows no runners to take root and produce new plants for each runner. He says that the new forming of plants by runners is exhausting to the strawberry plants.

You will notice that the method is equal to what is called the Hill system, although the strawberries planted by the Hill system are planted more than one foot apart. The bed consists of five rows of plants one foot apart. Then comes the pathway of two feet, then another plat of five feet in width. Notice that in this way the picker can reach half way across the bed in picking.

By the above system it is stated that since the plants do not get exhausted by running and by being crowded together the same plants will bear fruit for more than ten years.

Excuse for Stealing.—There is a play called Caste. In this play is an old man, a drunkard by the name of Eccles. Eccles is left in charge of his grandchild, a babe, whose father is one of the nobility. Eccles is thirsting for a drink, and he reasons like this, "This babe is wearing a necklace which I could pawn for ten shillings. Why should this youngster stand in the way of an honest laborer who wants a drink and has not the money to buy it? It would be a disgrace for a poor laboring man like me to suffer for the want of a drink simply to allow this babe to wear something of which it has no need?" Thereupon the old drunkard steals the necklace and is about to depart when his daughter, the mother, enters and charges him with the theft and recovers the necklace. Wicked men can always find excuses or apologies for their crime. After the style of the wolf in the fable which was about to devour the lamb.

"Why should you kill me?" asked the lamb. "I have never harmed you."

"Yes you have, you have muddled the stream from which I drink."

"No," replied the lamb. "I have never muddled the stream."

"Then it was your father who muddled the stream, therefore I will kill you all the same."

To be innocent is not to be wise.



WOMAN'S Department

Words fitly spoken are like apples of gold in baskets of silver.—Proverbs.

The Fine Art of Cake Making.

Written for Green's Fruit Grower by
L. Eugenie Eldridge.

"Let all things be done decently and in order," applies to cake making as well as other things, and the first thing to put in order is yourself. Then clear the table of utensils and everything not needed, and place on the table everything that is needed.

If the weather is warm place eggs in cold water as they will froth finer, and be sure they are fresh as they will not make a stiff froth with any amount of heating unless they are.

Grease pans with fresh lard. It is better than butter. Line with paper, several thicknesses may be needed (this however depends upon the oven. Every housekeeper knows her own). Sift flour always for cake—sifted several times the cake will be finer, as in angel cake.

Good butter should be used as heat develops latent poor qualities. If very hard, warm, but in no case allow it to melt.

Beat yolks of eggs thoroughly. Set whites away in a cool place until the cake is ready for them, then beat quickly in a cool room, my rule says till they will remain in the dish when turned upside down (I do not always achieve this).

In using milk note this: Sour milk makes cake light and spongy; sweet milk one that cuts like pound cake, remembering that with sour milk soda alone is used, with sweet, baking powder or cream tartar and soda.

Always add flavoring last, and always cream together the butter and sugar.

And there is great "knack" in beating cake. Don't stir but beat thoroughly, bringing the batter up from bottom of dish at every stroke, remembering that the motion should always be upward.

Earthen or stoneware is much better than tin for mixing cake of any kind.

All cakes not made with yeast should be baked as soon as possible after they are mixed.

The oven should receive careful attention. Have a good body of fire and keep the heat as even as possible.

Cakes should rise and begin to bake before browning much. If necessary to move the cake while baking do it very gently. Be careful not to remove from the oven until done and do not leave the oven door open. A tin chest or

stone jar is best to keep cake in, and some kinds should be closely wrapped in a large napkin that the aroma should not be lost.

Those Inconvenient Kitchens.

Farmers' wives must be very patient, or there would not be so many of them willing to put up with inconvenient kitchens. Those built several decades ago are especially lacking in everything that they should have, says "Tribune Farmer." One of my neighbors, for instance, has a cramped little kitchen which contains no sink or cupboards that are fit to use. To reach the pantry, it is necessary to cross the sitting room after stepping up a step of six inches. The pantry itself is not at all handy, and has open shelves, which are trash and dust collectors. These open shelves were useful, I suppose, when milk was kept at home and set in pans. But now that we have cream separators and the milk is taken to creameries they are a bugbear. For forty years this woman has gone back and forth countless times every day. All the water has been carried in, used, and then carried out again, making so much extra work.

The expenditure of a few dollars in the past in remodeling that kitchen would have saved her miles of steps, besides making home pleasant where it has always been ugly. But she says that they never thought it worth while to put much money on the house, as they intended to sell some day!

Gleanings.—If one wants to have Hamburg steak, croquettes or chops for luncheon on ironing day, when it is particularly important that the top of the stove be kept free from grease spots, these meats may be cooked in the oven instead of being fried. The oven should be very hot.

If the house is heated by hot air furnace it is an excellent scheme to screen the registers by stretching pieces of wire netting over the opening just beneath the grating. This prevents the loss of many a small article which might otherwise fall into the opening and down the pipe.

The addition of whitening to the starch used for stiffening children's muslin clothing is said to render the latter much less inflammable. Half as much whitening as starch is used.

A housewife who doesn't like to burn her fingers has made a long pocketlike arrangement of stout, but washable, material, which she keeps hanging near the stove and slips over her hand, and up to her elbow whenever it is necessary to put her hand into the oven.

Sausage for Company Dinner.

Written for Green's Fruit Grower by
Mrs. Emma B. Johnson, Kan.

Take two pounds of well seasoned sausage and form into a long mould or loaf. Put it into a small size baking pan, and sprinkle a little flour over it. Peel and split enough medium size potatoes to form a wall around the sausage, by laying the flat side of the potatoes against the meat. Place in hot oven and bake to a nice brown. Remove meat from platter, pile potatoes around, and make a cream gravy from drippings.

Chicken and Dumplings.—Cut up and put chicken in cold water. When done drain all the chicken gravy into bread pan on stove. While boiling drop in dumplings. When all in, put in top of oven and bake a golden brown. For making dumplings take pint of flour, one-half teaspoonful of salt, and table-spoonful of butter, one teaspoonful of baking powder; moisten with enough sweet milk to make a soft dough.

Let me live in my house by the side of the road,
Where the race of men go by,
They are good, they are bad, they are weak, they are strong,
Wise, foolish—so am I.
Then why should I sit in the scorner's seat,
Or hurl the cynic's ban?
Let me live in my house by the side of the road,
And be a friend of man.
—Sam Walter Foss.

With Rhubarb or Pieplant.

Written for Green's Fruit Grower by
Elma Iona Locke.

With warmer weather comes a desire for a change from the heavy winter diet, and the pleasant acid of the first product of the garden, pieplant, is a wholesome appetizer. There are many ways of preparing pieplant for the table, and following are given some of them:

Stewed Pieplant.—Unless the stalks are very young and tender, it is best to remove some of the surplus acid, and this will save in the amount of sugar required. Peel and cut in inch or half-inch lengths, then pour boiling water over to cover, let stand a few minutes, then pour off and add fresh water for cooking. This greatly reduces the sourness of the pieplant, and the fruit may be prepared in this way for other uses except stewing. For sauce, add only a little fresh water, and stew until tender, a little lemon peel stewed with it gives a pleasant flavor, when tender, add sugar to taste while it is still hot.

Baked Pieplant.—To one pint of pieplant, peeled and cut, add one cup of sugar, put into an earthen or granite dish, and bake in the oven slowly until of the consistency of thin jelly.

Pieplant Pie.—Line a pie tin with nice paste, put in one large cupful of pieplant cut small, beat together one-half cupful of sugar and one egg, and pour over the top, sprinkle over a small pinch of salt, and cover with a top crust and bake.

Pieplant Custard Pie.—Stew one pint of finely chopped pieplant in a very little water until tender, rub through a sieve, add one cupful of sugar mixed with one tablespoonful of flour, and two well beaten eggs. Line a pie tin with rich paste, brush it over with white of egg, pour in the pieplant mixture, and bake in a quick oven. Add a meringue of the white of an egg beaten stiff with a spoonful of sugar, or serve with whipped cream heaped on the top.

Pieplant Crumb Pie.—Line a pie tin with nice pastry, fill with a mixture of two cupfuls of thinly sliced pieplant, one well beaten egg, one cupful of sugar, and one-half cupful of bread crumbs. Add some flavoring if desired, and bake with an under crust only.

Pieplant Shortcake.—Make a rich crust and roll out in two thin cakes, butter the top of one and lay the other upon it, and bake in a quick oven. When done, separate the two layers, butter well, and spread while hot with a rich pieplant sauce, between the layers and on top. A few chopped dates or figs stewed with the pieplant would be an improvement, and it may be served with whipped and well sweetened cream.

Pieplant Pudding.—Peel and cut the pieplant fine, mix with an equal amount of sugar, and add grated nutmeg to flavor. Put a layer of bread crumbs in a buttered pudding dish, add a layer of the pieplant and sugar, and repeat until the dish is full, dotting the layers with bits of butter. Add a little water and bake for an hour in a slow oven. Serve either hot or cold, with whipped cream.

Pieplant Dessert.—Cook one quart of finely chopped pieplant in a very little water until soft, rub through a sieve, and sugar to taste, flavor with lemon, and let get very cold. Beat the whites of two eggs stiff with two tablespoonfuls of powdered sugar, whisk lightly into the pieplant, sprinkle the top with sugar and finely chopped almonds, and serve at once.

Hints to Housekeepers.

When making curry always use a wooden spoon. Iron spoons spoil the aroma of the spices.

Sweet green peppers filled with sweet breads that have been cooked and dressed with a cream sauce and baked until the peppers are tender make a delicious entree. A few mushrooms added to the sweetbreads improve the dish.

Before cooking onions soak them in warm salted water for an hour, as this greatly improves their flavor.

Rice has a finer flavor if washed in hot water instead of cold before cooking.

To make small cakes turn out easily from the baking tins, dip the bottom of the tin in cold water, or set it on a dish towel wrung out in cold water.

Black oak or Flemish oak and all other furniture finished with what is called a wax finish should not be cleaned with the regular furniture polish, but with a wax polish.

In making sandwiches, cream the butter before spreading it on the bread. If thin slices are wanted butter the bread before cutting the slices.

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With cream or stewed fruit.

DELICIOUS!

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"The Memory Lingers"

Postum Cereal Co., Ltd.
Battle Creek, Mich.

The Other Fellow.

Written for Green's Fruit Grower by
Katharine Lounsbury.

We can get a lot of comfort
Out of life, if we just try
To take the other fellow's place,
And let our cares slide by.
And not spend all our moments
Thinking every cloud is gray,
For some have silver linings,
If we see them the right way.

We're inclined to think our troubles
Are much worse than all the rest,
Instead of being cheerful,
And regarding things as best.
But if we'll just begin and try
The optimism plan,
And give a cheerful look or word,
Or smile whenever we can;

This world will soon grow better,
And everything more bright,
Our cares will not seem half so bad,
And in the end prove right.
Then soon the other fellow
Will catch the spirit too,
And all will feel the world,
For them, is made anew.

Conscientious Wooer Did Not Want Any Misunderstanding.

"Now that that part of it's settled," said the venerable widower who had just proposed to the aged widow and had been accepted, "there are a few little things that I want to speak about so there may be no misunderstanding," says Chicago "News." "When we go to keeping house you mustn't expect me to beat carpets or tinker around the house doing a woman's work. I've always held that a woman should do her own housework if her husband provides the grub."

"That's fair enough, Mr. Wigler," replied the widow, cordially, "and I think it a good plan to have everything understood beforehand. Half the marriages in this country are failures because the high contracting parties are not open and candid with each other. Now, I want it understood that I won't get up on cold mornings and build fires. That's a man's work and no woman should consent to do it. Don't you agree with me?"

"Well, I don't know," replied the prospective bridegroom, thoughtfully. "It never occurred to me in just that light. It always seemed to me that a man, being the breadwinner, as it were, ought to have certain privileges, and one of them is lying in the bed until breakfast's ready. But I'll think that matter over—take it under advisement, so to speak, and hand down a decision later."

"However there are more important things. You have a cow and I have a cow, and when we are married there'll be two cows to milk. I feel sure that you'll undertake that work quite cheerfully. If there's one job that I hate above all others it's milking a cow, and milking two cows is out of the question. That is a woman's work you must admit. Somehow a man seems to lose his dignity when he squats down on a blamed old milking stool."

"Well, when you see me milking two cows, Mr. Wigler, I think you'll know it. One reason why I consented to marry again is that I want to have a man to do the milking. A woman's work, indeed! Really, I am surprised, Mr. Wigler! I'll be perfectly willing to do the churning if you'll furnish me with one of the late model churns, which can be operated with a treadle, so that a lady can sit and read while she's making butter, but as for milking the cows, I certainly wouldn't dream of doing such a thing. And, now that I think of it, I'll say that I don't expect to work in the garden in the summer."

"I am astonished to hear you give utterance to such revolutionary sentiments, Mrs. Nixen. I never before heard a lady talk in such reckless manner. Why, the care of the garden is always the province of a good wife. Read the works of Eben E. Rexford—read the splendid essays of Van Dyke—read the—"

"I don't care anything about the works of anybody. I don't have to read books or essays to find out that working in a garden breaks a woman's back. I think I see myself marrying a man who will sit in the house smoking, with his feet on the clock shelf, while his wife is pulling weeds out of the onion bed! If a man is too lazy to work in the garden let him buy vegetables at the grocery and not expect his wife to hitch herself to a plow and work like a mule."

"Oh, I guess we can arrange the garden matter satisfactorily," said the prospective bridegroom, dubiously. "but there's one thing that I must insist upon, and that is that my wife shall not invite her relatives to dinner more than once a year. If there's anything I hate it's to have the house swarming with my wife's kin. That's one thing that I won't stand for."

"Well, then, Mr. Wigler," said the widow, "you can just go somewhere else for a wife. I'm thankful that you showed up in your true colors before I was foolish enough to marry you! I

never met such an unreasonable man before in my life. The idea of a woman's shutting the door to her own folks in order to please an old bald-headed curmudgeon like you!"

With Apples.

Written for Green's Fruit Grower by
Elma Iona Locke.

Baked Apples.—Pare the apples and cut out the core, fill the cavity with sugar mixed with a little grated lemon rind, add a few drops of lemon juice, and place a bit of butter on top. Set the apples in an earthen or granite dish, pour around them water in which the parings have been cooked for a few minutes, and set the dish of apples in the oven to bake, basting them several times while baking.

Apple Souffle.—Peel and core six ordinary sized apples and stew them in a little sugar and water. When done, press through a sieve, and stir over a hot fire until they are thick. Cool a few minutes, then add the yolks of two eggs. Beat the whites of six eggs stiff, adding six tablespoons of powdered sugar, and mix lightly with the apple. Put into a well buttered mold, powder the top with sugar, and bake until the egg is set. Serve at once, with whipped cream.

Apple Omelet.—Separate four eggs, beating the whites and yolks separately, then put them together and beat again, gradually adding two tablespoons of powdered sugar. Oil a hot omelet pan, pour in the mixture, cover, and when it begins to thicken, spread over it a layer of apple-sauce. Fold, turn out, and serve at once with powdered sugar.

Apple Omelet, Baked.—Pare, core, and stew six or eight large cooking apples, when quite soft, mash, add one cup of sugar, one ounce of butter, and season with cinnamon. Let cool, then stir in the beaten yolks of four eggs. Beat the whites to a stiff froth, and add, then pour all into a shallow pudding dish and brown in a hot oven.

Apple Muffins.—Cream together one cup of sugar and one large tablespoon of butter. Add two beaten eggs, one cup of milk, one pint of chopped apples, one and one-half teaspoons of baking powder, and flour to make a stiff batter. Bake in well greased gem or muffin pans.

Apple Pone.—Pare and chop one quart of sweet apples. Pour one pint of boiling water into one quart of white corn meal, when it has cooled somewhat, add one pint of sweet milk, and the chopped apple. Turn into a greased pan, cover, and bake for two hours. Eat with sauce.

The Model Wife.

Had he consulted the Book of Proverbs for counsel while he was still a bachelor, how differently he might have fared. What if he had taken as his guide the description of a good wife which he would have found there?

Who can find a virtuous woman? for her price is above rubies.

The heart of her husband doth safely trust in her, so that he shall have no need of spoil.

She will do him good and not evil all the days of her life.

She seeketh wool and flax and worketh willingly with her hands.

She riseth also while it is yet night, and giveth meat to her household, and a portion to her maidens.

She considereth a field and buyeth it: with the fruit of her hands she planteth a vineyard.

She girdeth her loins with strength, and strengtheneth her arms.

She perceiveth that her merchandise is good: her candle goeth not out by night.

She layeth her hands to the spindle, and her hands hold the distaff.

She stretcheth out her hand to the poor; yea, she reacheth forth her hands to the needy.

Her husband is known in the gates, when he sitteth among the elders of the land.

Strength and honor are her clothing; and she shall rejoice in time to come.

She openeth her mouth with wisdom; and in her tongue is the law of kindness.

She looketh well to the ways of the household, and eateth not the bread of idleness.

Her children arise up and call her blessed; her husband also and he praiseth her.

To Polish Furniture.—For furniture there is nothing to equal olive oil or raw linseed oil, rubbed into the wood, according to the grain. The woodwork may require retainting as well. Ordinary old oak is always improved by rubbing it with warm beer. It should be remembered that linseed oil has the effect of darkening mahogany.

"For howsoever love be blind
The world at large hath eyes."

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That's why the ordinary soda cracker remained so long in obscurity.

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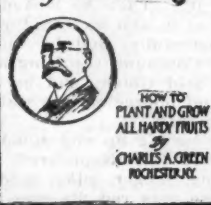
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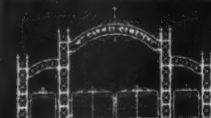
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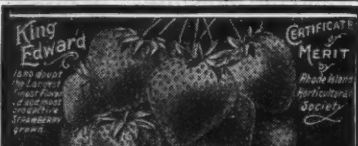
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Black, Red, Yellow and Purple varieties.

Blackberry Plants by the million

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The King of the Golden River

A Story by John Ruskin.

CHAPTER V.

When Gluck found that Schwartz did not come back, he was very sorry, and did not know what to do. He had no money, and was obliged to go and hire himself again to the goldsmith, who worked him very hard, and gave him very little money. So, after a month or two, Gluck grew tired, and made up his mind to go and try his fortune with the Golden River. "The little king looked very kind," thought he. "I don't think he will turn me into a black stone." So he went to the priest, and the priest gave him some holy water as soon as he asked for it. Then Gluck took some bread in his basket, and a bottle of water, and set off very early for the mountains.

If the glacier had occasioned a great deal of fatigue to his brothers, it was twenty times worse for him, who was neither so strong nor so practiced on the mountains. He had several very bad falls, lost his basket and bread, and was very much frightened at the strange noises under the ice. He lay a long time to rest on the grass, after he had got over, and began to climb the hill just in the hottest part of the day. When he had climbed for an hour, he got dreadfully thirsty, and was going to drink like his brothers, when he saw an old man coming down the path above him, looking very feeble, and leaning on a staff. "My son," said the old man, "I am faint with thirst, give me some of that water." Then Gluck looked at him, and when he saw that he was pale and weary, he gave him the water; "Only pray don't drink it all," said Gluck. But the old man drank a great deal, and gave him back the bottle two-thirds empty. Then he bade him good speed, and Gluck went on again merrily. And the path became easier to his feet, and two or three blades of grass appeared upon it, and some grasshoppers began singing on the bank beside it; and Gluck thought he had never heard such merry singing.

Then he went on for another hour, and the thirst increased on him so that he thought he would be forced to drink. But, as he raised the flask, he saw a little child lying panting by the roadside, and it cried out piteously for water. Then Gluck struggled with himself, and determined to bear the thirst a little longer; and he put the bottle to the child's lips, and it drank it all but a few drops. Then it smiled on him, and got up, and ran down the hill; and Gluck looked after it, till it became as small as a little star, and then turned and began climbing again. And then there were all kinds of sweet flowers growing on the rocks, bright green moss, with pale pink starry flowers, and soft belled gentians, more blue than the sky at its deepest, and pure white transparent lilies. And crimson and purple butterflies darted hither and thither, and the sky sent down such pure light, that Gluck had never felt so happy in his life.

Yet, when he had climbed for another hour, his thirst became intolerable again; and when he looked at his bottle, he saw that there were only five or six drops left in it, and he could not venture to drink. And, as he was hanging the flask to his belt again, he saw a little dog lying on the rocks, gasping for breath—just as Hans had seen on the day of his ascent. And Gluck stopped and looked at it and then at the Golden River, not five hundred yards above him; and he thought of the dwarf's words, "that no one could succeed, except in his first attempt"; and he tried to pass the dog, but it whined piteously, and Gluck stopped again. "Poor beastie," said Gluck, "it will be dead when I come down again, if I don't help it." Then he looked closer and closer at it, and its eyes turned on him so mournfully, that he could not stand it. "Confound the King and his gold too," said Gluck; and he opened the flask and poured all the water into the dog's mouth.

The dog sprang up and stood on its hind legs. Its tail disappeared, its ears became long, longer, silky, golden; its nose became very red, its eyes became very twinkling; in three seconds the dog was gone, and before Gluck stood his old acquaintance, the King of the Golden River.

"Thank you," said the monarch; "but don't be frightened, it's all right," for Gluck showed manifest symptoms of consternation at this unlooked-for reply to his last observation.

"Why didn't you come before," continued the dwarf, "instead of sending me those rascally brothers of yours, for me to have the trouble of turning

into stones? Very hard stones they make too."

"Oh dear me!" said Gluck, "have you really been so cruel?"

"Cruel!" said the dwarf, "they poured unholy water into my stream; do you suppose I am going to allow that?"

"Why," said Gluck, "I'm sure, sir—your majesty, I mean—they got the water out of the church font."

"Very probably," replied the dwarf; "but," and his countenance grew stern as he spoke, "the water which has been refused to the cry of the weary and dying is unholy, though it had been blessed by every saint in heaven; and the water which is found in the vessel of mercy is holy, though it had been defiled with corpses."

So saying, the dwarf stooped and plucked a lily that grew at his feet. On its white leaves there hung three drops of clear dew. And the dwarf shook them into the flask which Gluck held in his hand. "Cast these into the river," he said, "and descend on the other side of the mountains into the Treasure Valley. And so good speed."

As he spoke, the figure of the dwarf became indistinct. The playing colors of his robe formed themselves into a prismatic mist of dewy light; he stood for an instant veiled with them as with the belt of a broad rainbow. The colors grew faint, the mist rose into the air; the monarch had evaporated.

And Gluck climbed to the brink of the Golden River, and its waves were as clear as crystal, and as brilliant as the sun. And, when he cast the three drops of dew into the stream, there opened where they fell a small circular whirlpool, into which the waters descended with a musical noise.

Gluck stood watching it for some time, very much disappointed, because not only the river was not turned into gold, but its waters seemed much diminished in quantity. Yet he obeyed his friend the dwarf, and descended the other side of the mountains towards the Treasure Valley; and, as he went, he thought he heard the noise of water working its way under the ground. And, when he came in sight of the Treasure Valley, behold, a river, like the Golden River, was springing from a new cleft of the rocks above it, and was flowing in innumerable streams among the dry heaps of red sand.

And as Gluck gazed, fresh grass sprang beside the new streams, and creeping plants grew, and climbed among the moistening soil. Young flowers opened suddenly along the river sides, as stars leap out when twilight is deepening, and thickets of myrtle, and tendrils of vine, cast lengthening shadows over the valley as they grew. And thus the Treasure Valley became a garden again, and the inheritance, which had been lost by cruelty, was regained by love.

And Gluck went, and dwelt in the valley, and the poor were never driven from his door: so that his barns became full of corn, and his house of treasure. And, for him, the river had, according to the dwarf's promise, become a River of Gold.

And, to this day, the inhabitants of the valley point out the place where the three drops of holy dew were cast into the stream, and trace the course of the Golden River under the ground, until it emerges in the Treasure Valley. And at the top of the cataract of the Golden River, are still to be seen two Black Stones, round which the waters howl mournfully every day at sunset; and these stones are still called by the people of the valley, The Black Brothers.

The End.

Delicately Expressed.

Eliza Jane met her mistress just before Christmas with the ominous announcement:

"Missus, I've gotter leave yer."

"Why, 'Liza, what's the matter? Aren't you satisfied with your place?"

"Yessum, I'se satisfied a'right. Tain't dat, mum."

"Well, is it that you want more wages?"

"Naw'm, 'tain't that, neither."

"Are you sick?"

"Naw'm, I ain't sick, but I tell you a fac'. You recole' you let me git off to a funeral 'bout a mont' back? Well'm, Chris'mis morn' I's going to marry de corpse's hushban'." — "Ladies' Home Journal."

"Thou shalt rise up before the hoary head, and honor the face of the old man."—Lev. 10:32.

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Aunt Hannah's Replies

Wants the Care of an Invalid.

A trained nurse in New York state writes me that she would like to take the entire care of an invalid, the invalid to move to the nurse's home and live there. She hopes in this way to be able to earn something to enable her to educate her children.

Aunt Hannah's reply: The difficulty in the way of your plan is that most invalids prefer to remain at home. They would not know whether they would be contented in your home until they had experimented with it. The moving to and fro would be objectionable. Most nursing is done at the home of the invalid. Surely all invalids desire to remain at home. There are invalids who have no home but usually such people are not able to pay much for their care and treatment. How many people there are who desire some method of earning a little money at home. Is there any person who will suggest a plan to help many worthy people out? At present I can think of nothing more promising than to put up fruit in glass cans the way the usual housewife does her canning. If you are skilled in putting up fruit, and can procure the fruit at reasonable prices in your locality, this may be more attractive and profitable than nursing. I advise you to begin in a small way to test your ability in making the goods and in finding a market for them. I have a lady friend who has made a notable success of this work. She has many wealthy patrons outside of her own locality who order her canned goods every year.

Broken Hearted.

There are many broken hearted people. This is a world of broken hearts, therefore when we can be happy we should make the most of the sunshine that falls upon us and make it part of the business of our life to be happy. This girl's promised husband is seeking the society of other girls and seems to be weaning himself of the love of the writer, who asks, "What shall I do?"

Aunt Hannah's reply: You and every other girl must expect that a young man who has just left college and has the world before him, will be inclined to do the best possible thing for his own welfare, and in the question of marriage will feel the necessity of making a large circle of acquaintances and in selecting as a companion for life the one he considers best suited to him. The fact that he has promised to marry you is not in itself sufficient reason that he should do so, for if his love has grown cold it is well for you that he should not marry you. Love is a strange thing. The poet says that love never dies, but there are many who can testify that love does die, but it leaves a scar and continues to affect the life of every individual who has fallen under its sway. I advise you to go into society and meet many young men just as he advises you to do. I would not give up the old love positively until necessity compels, for it is possible that he may fulfill his promise to marry you. Make yourself as interesting as possible in every way and conduct yourself as though you expected he would marry you. I often tremble for girls who must submit to the fickleness of mankind, and to what must be considered unfaithfulness. Both boys and girls are fickle. It would be hard to tell which is the more so. It is a rare incident wherein an attractive young man with fairly good prospects does not fall in love from six to a dozen times before he marries, without the least intention of doing any injustice to any one of the girls he has admired.

Dear Aunt Hannah: I read your replies every time and am sorry when there are none to read. Will you give me some advice? I am a farmer's daughter and was raised to work in and out of doors. My father sent me to school enough to get an education and now I am teaching. Ever since I was in my middle teens (or something like ten years ago) I have had beaux, plenty of them with some to spare. Some of them were merchants, ministers and men of other professions. I have never loved one of them well enough to marry him. About six years ago I met a young farmer that I liked as a friend. Two years later he came to see me several times and told me how much he thought of me, but I dismissed him expecting it to be the last as is usually the case. He was not so easy to turn down and kept coming once in awhile.

I did not object to his visits as a friend and I told him that I didn't think we could ever be anything more than friends. He never said anything more about loving me for nearly four years but was nice to me, not being over attentive as some are. He has again told me of his love and asked me to be his wife some day. I believe he is a sincere Christian gentleman and would make a true husband. I have other beaux whose prospects for making money are better than his, but I can't say that there is anyone ahead of him, though I don't believe I think enough of him to marry and hate to say no, because that might be the last. Please tell me what to do for I don't know. Thanking you ever so much for the reply.—Kate.

Aunt Hannah's reply: Your question is one which you alone can answer. Is it not strange that any girl should write me asking which of her lovers she should accept? That is practically the question you ask. In your present condition of mind I advise you to accept none of the young men. Tell this young farmer that you require more time to decide whether you will marry him or not. Evidently he has enough good sense to be willing to wait. When in doubt be on the safe side is a good motto. If you are in doubt whether the railroad train is coming over the track which you will pass, wait, watch and listen. There are a few young people who realize the importance of a proper selection of husband or wife. There are few who wait long enough to be able to make a wise decision. Some people are too hasty in such important affairs, which may make, mar or ruin a life, or two lives, or many lives. If you were to select a horse, or cow, a cat, a dog, a house, which you were to have with you all through your life, you would be careful, you would be deliberate in making your choice, yet there are young people who select a husband or wife more hastily and with less consideration than they would select a home, a house or a cow.

Kill the Rats.

The English authorities are fighting the danger with customary thoroughness. In some districts as high as 10,000 rats are being killed daily. Owners of stores, factories, mills, warehouses, railroads, householders and even farmers are united in the war of extermination. To those who are too poor to purchase poison it is furnished free. So infectious are the rats that the collectors are not allowed to touch them. With a pair of tongs the dead rat is first dipped into a pall of disinfectant, transferred to a steel box cart and hauled to a crematory. It is no longer safe to eat rabbits and other ground animals. It has become dangerous to handle cats. Food which rats have gnawed imparts disease when eaten. Even ferrets speedily contract the plague and die.

The menace to this country is but slightly realized. With Europe but five to seven days away, we will as surely get the rats as we now get European fashions. It may sound absurd, but we might better set apart a day or days to exterminate rats than as we now do to do tree-planting, clearing our cities or observing some of our holidays. What is needed is concerted national action. Boys of a few years ago will recall the easy money in sparrows when some counties paid a bonus of one cent per head. At the same price a million dollars paid for dead rats would be worth several times the same amount left to some research fund.

Farmer Crittle—"What are you working on?" asked Parsons. Reid pointed to an easel on which stood the picture of the girl and the cow.

Parsons looked it over for some time and, blowing out a big wreath of pipe smoke, asked:

"What is the girl going to do?"

"Going to do?" ejaculated Reid.

"Why, milk the cow, of course."

"What is she doing with her arm around the cow's neck?" asked Parsons.

"Leading the cow to the lot," replied Reid, mixing some paint.

"Well, where is the milk pail?" demanded Parsons.

"She hasn't any milk pail," replied Reid.

"H'm," replied Parsons. "Then maybe she isn't going to milk the cow."

"She hasn't any milk pail," replied Reid.

"Well, if she isn't," persisted Parsons, blowing another puff of smoke, "what is the girl going to do with that milking stool?"

"Oh," snorted Reid, "she is going to hit the darned cow over the head with it!"



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the Trinidad-Lake-Asphalt Roofing is made of genuine natural asphalt—perfectly stable and uniform in quality.

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A magnificent example of nature's response to systematic industry is shown by the world's largest peach orchard, a developed resource, covering three thousand acres of rolling upland.

Vast and varied though our resources be, we are only just awakening to the opportunities which everywhere are inviting man to seek and develop hitherto untapped avenues, and always with the sure promise that large rewards are awaiting every earnest endeavor, as this three-thousand-acre ranch lays claim to, says Rochester, N. Y., "Democrat and Chronicle."

It requires an army grouped under captains, who in turn are under directing officers to attend to this immense orchard which is cultivated the year round. For with three thousand acres of ground and one hundred trees to an acre the problem is easy of calculation. Three hundred thousand trees have to be visited daily. Constant cultivation is needed to arrive at the result desired, a bushel of ripe fruit at least is expected of each tree, and from that up to eight or ten. Pickers say they have gathered as many as twelve bushels from a single tree.

This immense industry, the world's largest peach orchard, is located a few miles south of the city of De Queen, Arkansas.



Green's Fruit Grower: We are sending you photograph of Ray's Mammoth quince trees, sixteen in number. I planted them eighteen years ago. They began to bear the third year after planting. I cultivated them the first five years. Since that time have been in sod. I gave them plenty of salt, coal ashes, and barn yard manure, and trimmed them up two to four feet from the ground in the shape of apple trees. The tops spread twelve to twenty-four feet. In 1908 picked twenty-six bushels, 1909 thirty-six bushels, 1910 a failure, got only about two bushels. In 1909, from a few trees standing in the house yard, I picked from four to six bushels per tree. I have tried all kinds of quinces in this locality and find the Ray's Mammoth the best.—John W. Williams, Ind.

It is the only orchard on the face of the globe which produces a single variety of fruit in such abundance, and that is going some for there are some other very big orchards. All around the boundaries of this immense forest are scattered cottages which if desired may be occupied by families who come from a distance of one hundred miles on "an outing," as they regard gathering peaches and earning money at the same time.

A large boarding hall and bunk house is likewise provided by the owners of the orchard where the help may obtain accommodations.

Many of the workers bring tents and camp out in a truly realistic fashion. For the spirit of romance is not without its devotees at the busy season in the orchard.

Place for Honeymoon.

Aside from making it a profitable holiday, a young couple often find it an ideal spot to spend their honeymoon. Peaches and the tender emotion always have been linked together, as it were.

Among the recent harvest hands were two young girls from Oklahoma, who were chaperoned by their father and mother.

They were off on their vacation, but did not feel like idling away their time. Another thing, the girls wanted a new carriage, and with all the gay lads and lassies about picking and canning peaches was no end of fun. So, they worked away until, to their great joy they had earned enough to purchase their handsome new vehicle, as well as to extend their holiday indefinitely.

Compared with the ordinary orchard this fruit forest, which every year is invaded by an army of ten thousand or more pickers, becomes a little world in itself. And the beauty of the scarlet and golden fruit bring many hundreds of visitors from the villages and other parts of the country who enjoy looking at the grand picture thus spread out for them to gaze upon.

In the different parts of the orchard there are large packing sheds. It is here that the fruit is sorted and packed

and sent to market by the trainload.

In every department the work is thoroughly systematized. For it must be done in a hurry.

The fruit is brought to the sheds in bushel baskets and it comes by the wagonloads. Every peach is handled by expert sorters, and placed where it belongs.

The finest is wrapped in tissue paper, the next grade is put into crates without wrappers, while the orchard run is shipped in bushel baskets.

A soft peach, however, or one with any kind of a flaw, is not permitted to go into any class. All such are thrown into the refuse heap. And whoever cares to haul them away at the rate of from ten to twenty-five cents a bushel, is welcome to do so.

Fruit by the wagon load is secured in this manner, and afterwards peddled about in the neighboring towns.

Refrigerator cars, lined up in strings, to receive the fruit, are a common sight around the peach orchard. They reach the packing sheds by spurs from the railroad.

To prevent the peaches from jostling about each row of crates is securely cleated to the car.

It takes about five hundred crates to fill a car. And upon an estimate each crate will hold two-thirds of a bushel, although various sizes of containers are used.

Starting this immense orchard, com-

prised of Elberta peach trees, was an undertaking which required considerable fore-thought. By cultivating and watching with care, however, the experiment was successfully carried through. When the trees were young, other crops were grown between the rows. Thus making the cultivation of the orchard pay for itself.

Defining a Phenomenon.

A workman, endeavoring to explain to one of his mates what a phenomenon was, made the following attempt:

"It's like this: Suppose you were to go into the country and see a field of thistles growing."

"Yes," assented his friend.

"Well, that would not be a phenomenon."

"No, that's quite clear," agreed the other man.

"But suppose you were to see a lark sing away up in the sky."

"Yes."

"Well, that would not be a phenomenon."

"No, that also seems clear."

"But imagine there is a bull in the field."

"Yes," his friend could imagine that.

"Even that would not be a phenomenon."

"No."

"But now, Bill, look here. Suppose you saw that bull sitting on them thistles whistling like a lark—well, that would be a phenomenon!"

Pudding-Head Philosopher.

Log-rolling and fixing up fences are but two aspects of the same job.

When in Rome be sure to eat Roman candles or something quite as light and frivolous.

Eat, drink and be merry for to-morrow the price may take another jump upwards.

If a fellow with a wad expects to rock along without being sheared he might as well move in among the goats.

The world is a long time learning the lesson that nothing worth while is accomplished without sacrifice.

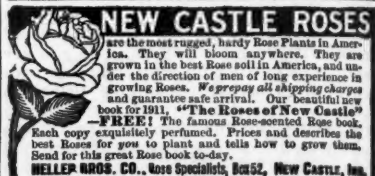


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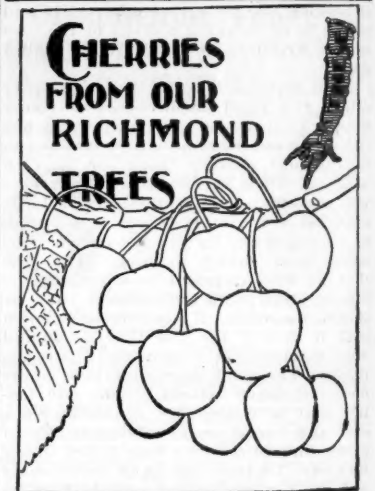
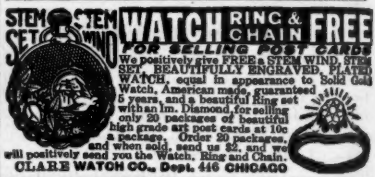
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We have dug and ready for shipment the finest cherry trees we have ever grown. We find that we have a surplus of cherry trees, sweet and sour, red and black, therefore if you are thinking of planting fifty, one hundred, or more cherry trees do not fail to write us stating the number of trees you want and the varieties. We will reply giving lowest price for first-class trees either of the largest or medium size.

The cherry is attracting more attention each year as a profitable orchard fruit. It may be doubted whether there is any other fruit which will bring so much money per acre under judicious treatment as the cherry. It is a regular bearer producing heavy crops. The cherry is freer from insects and diseases than almost any other fruit. Catalogue mailed free on application.—Green's Nursery Co., Rochester, N. Y.



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The Beacon Light.

Written for Green's Fruit Grower by
L. Eugene Eldridge.

Away in the distance shines the light,
We are out on the stormy sea;
But piercing the gloom and dark of night
The beacon streams right cheerily.
Its rays gleam out across the deep—
It whispers hope, it whispers cheer,
It lulls our troubled fears to sleep,
And tells of port and harbor near.

Our freighted bark on life's broad sea,
All laden well with precious store,
Sails on in dim uncertainty,
Nor heeds the reef-rocks near the shore,
Nor sights the billows' surge and swell,
Nor hears the fog-bell's warning call,
Nor dreams that shoals and quicksands
Dwell.

Where eddying waters rise and fall.
All helpless sails this treasure ship,
For see! the helm and chart are gone,
When lo! it speeds from lip to lip,
"The beacon guides—the light cheers
on!"

On through the midnight gloom of night,
O'er life's wild billows tempest-tossed,
This constant, changeless beacon light,
Shall hold and save, when all is lost.

For 'tis the light of home that shines
With steadfast promise, sure and strong,
Illumines hope and softens lines
That care has written, deep and long.

That cheers our grief, dispels the dark,
Our compass, chart, and helm in one—
That moors the fragile human bark,
In love's sweet haven—port of home.

A Name—What Ambition Said to the Young Man.

Written for Green's Fruit Grower by
Wilson L. Haisley.

Just so long ago you were endowed
With a name, new coined and bright,
With the privilege of placing it untarnished
Upon a golden seal of honor
and truth, or, soiled with dishonor and
unrighteousness.

Now you have entered a field of enter-
prise, a test, where the merits and flaws
of the vessel will be discovered. The
results will in time be imprinted upon
the seal where the world can see and
believe. The name will be passed from
mouth to mouth and your character will
be known. This is altogether fitting
and just.

Even in the smaller circle of friends
that name is honored or scorned on
life's program as the man is found to
be worthy or unworthy. The vessel will
be elevated and placed in the sight of
the multitude as their masterpiece or
hidden low adown with their conception
of failures and disappointments.

Guard well your speech, thoughts, ac-
tions. Live up to the ideals and your
conception of the right for the soul that
dwells in you.

Some day the vessel shall be subjected
to a higher criticism than this world and
the jewels of your good intents will
shine forth in the light of His greater
wisdom and understanding. Some fine
points may be discovered in the vessel
now ignorantly concealed and they will
be placed on record with your unfor-
gotten benefits to man. Then there may
glow forth upon that higher seal of the
soul's handiwork—a name.

Lightning Causes the Greatest Losses by Fire.

Lightning causes three-quarters of
all the losses by fire, according to the
figures recently compiled by one hun-
dred and eleven insurance companies.
This is a statement that should cause
every farmer to stop and think.

"Is my farm protected from this
ever present danger?"

No one ever knows when or where
lightning will strike. The old saying
that lightning never strikes twice in
the same place has been proven
wrong. It is no respecter of persons
or places.

There is no place in the world where
one can say lightning will not strike.
The most stately and expensive man-
sion and the meanest hovel are al-
ways open to the attack of this de-
stroyer of the sky.

Lightning causes twenty times the
losses from fires caused by incendiar-
ism and carelessness.

Here, indeed, is a case where an
ounce of preventative is worth a pound
of cure.

Protection against this ever present
danger is simple and inexpensive. Yet,
thousands of farmers in all sections of
the country carelessly leave their home
and buildings at the mercy of light-
ning.

The perfection of the modern, scien-
tific lightning rod has made it possible
for every farmer to have absolute and
certain protection against lightning.

Carefully and scientifically woven,
many stranded rods made from abso-
lutely pure copper is the very best pro-
tection. Before buying a lightning rod
every farmer should be absolutely cer-
tain that he is getting one that is made
from absolutely the best material and
on the latest scientific principles.

Another valuable point to remember
is that the manner in which a light-
ning rod is erected is a most important
factor in determining whether it will

give protection or not. A rod not prop-
erly put up may be a constant source
of danger. It is not advisable to leave
the erection of lightning rods in the
hands of inexperienced men.

Another important achievement in
this field has been the perfection of
a specially constructed lightning ar-
rester for telephones. The rapid spread
of the use of the telephone over all the
sections of the country has created an
immense demand for this arrester.

This arrester is also made on the
latest and most scientific principles and
is being installed by a corps of compe-
tent operators all over the country.

The use of these lightning arrestors
cannot be too strongly urged upon every
farmer. The perfection of these pro-
tections is one of the greatest achieve-
ments of the age.

A little care and expense on the part
of a farmer will give him a life-long
security and protection against light-
ning.

Sum Sayings.

Written for Green's Fruit Grower by
Unkel Dudley.

To get mad an sta so is bout as
sensibul as to kik er wasp nest in
ordur tu get stung.

A fool who is willin tu lern is much
betur than wun who thinks he nose it
all.

The superfluos wants ov sum pepul
keep them on the rode tu povurty.

The boy who "plaze it on the ole
man" iz not wanted tu fil posishuns ov
onor an trust.

Home iz what we mak it, an er good
home is abuz prise.

The man who iz wize will put the
salvashun ov hiz own soul abuv every-
thing else.

It may be er good thing tu hev rich
relashuns, but it is far betur tu hev
er litul kash ov yure own.

The seeds ov kindnes produse
plants thet oftun blossom with love.

The boy who is allowed tu do az he
plezes genrally brings disgrace on him-
self, an sorow tu hiz parunts.

The gurl who cheerfully helps hur
muther genrally maks er good hous-
wife.

Wild Goose Story.—From the west
comes a strange tale of hardship, pos-
sible riches and impending death in
Alaska. As a sort of postscript, there is
the implied defense, "If you don't be-
lieve it, ask the man who killed the
goose." It is said that Fred Mordaunt,
of Webb, Neb., shot a wild goose which
was unlike other wild geese that follow
the Missouri and Mississippi southward
in December, in that it bore a message
from a prospector in Alaska. This was
attached to the goose's leg or neck by
a bit of wire. It is said the message
bore date of June 15 last, and was
signed by George Powers of Memphis,

who wrote that he had broken his right
arm after finding a rich vein of gold on
Pine Creek north of White Horse Pass,
Alaska; that he could not walk and was
unable to cook the little food he had in
his cabin. That it is possible to catch
a wild goose while it is moulting is
known. To write a letter and attach it
to a goose, using the left hand only,
might be more difficult for some
persons.—"Forest and Stream."

"What's the matter?" asked his
mother.

"I'm 'traid of the man," he said,
solemnly.

"Oh, he won't hurt you," reassured
Mrs. Jones. "Run along and bring the
onions. I'm in a hurry for them."

A second time Harry disappeared
round the corner, and a second time re-
turned without his purchase.

"I'm afraid of the grocer man," he
explained as before.

"Well, what makes you afraid of
him?" demanded his mother, impa-
tiently.

"Why," answered the little fellow,
"bofe times when I good in he looked
at me and said, 'I'll tend to you in a
minute.'"

The owner himself should know how
and when each horse is fed.

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4-Shovel Pin
Break Gangs.

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cultivator I have ever seen. The seat bar guiding
motion is the best thing out, and the advantage of
being able to raise and lower the gangs with the
balancing lever after having set them to exact
depth with the raising levers makes it superior to
all others. This is saying a good deal, but it's true.
The good features of this Little Jap make me feel
like striking out with it and working in fields
along the road, so as to convince people of its
superiority over all other makes.
Yours truly,
CHARLES TANSEL.

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So far ahead of any other that it really
should be called by some other name than
cultivator. Every other manufacturer hop-
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plow. Have used more different kinds of cultivators
than most men, and think I can plow corn as good as
any man living, and I must say that the Little Jap is
the best I ever used for good work and easy running,
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and he has simply got to plow corn.
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A. H. KNAPP.

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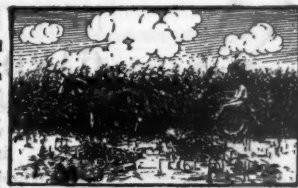
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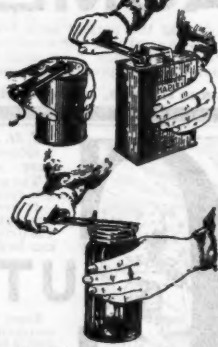
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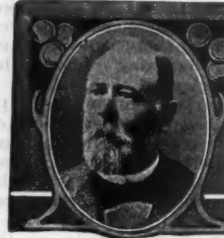


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Breezes from New Hampshire

Written for Green's Fruit Grower
by George B. Griffith.

Cats as Garden Helpers.

A gentleman who has many animal friends suggests a new use for cats which strikes us as "highly interesting." He writes that he has found them an invaluable help in keeping birds from garden fruit and flowers. His modus operandi is to attach a cat to a small chain, which slides upon a wire, giving the cat the walk up and down the entire length of the strawberry bed. A knot at each end of the wire prevents the cat from winding around the posts by which the wire is supported; and a kennel in the middle of the walk affords her a shelter and place of retreat. If she has kittens so much the better. The gentleman referred to has used this method for protecting fruit for more than thirty years which is certainly long enough for a fair trial. In a few days cats become used to this restraint, so that after some weeks of watching, if set free, they will of their own accord continue on guard. The kittens, more especially, attach themselves to this garden occupation.

Cats do not get half the credit for brightness which they deserve. They often show great ingenuity in catching their game. One cat would lay a piece of meat by a rat's hole, and then catch the rat when he came up to get the dainty morsel. Another used a little bird to decoy a large one, touching him to make him cry, while at the same time she had to keep her kitten from springing upon him. A cat does not become attached as easily as a dog, but when her confidence is once given, nothing can exceed her fidelity.

The Scotch Collie.

Those individual proclivities, the result of natural tendency supplemented by long and careful training, which distinguish different breeds of dogs, even more than do their form and color, are very prominent in the shepherd dog, or more properly Scotch collie, and evidence a high order of intelligence. Scotland is, of course, the native land of this clever and affectionate animal, and there he appears to the best advantage, in the highest development of his peculiar ability, as a guardian and a driver of sheep. The mountains of Scotland are not high enough to prevent vegetation, and their slopes and summits afford excellent pasturage for countless flocks of sheep, and this is the reason why men's clothes cost about one-half as much in London as they do here.

The aid of the collie dog is invaluable to the Scotch shepherd. His sheep go out to pasture on these mountains and mingle with hundreds of others, from which they would be almost inextricable if he depended on his own efforts alone, but he has a faithful servant whose keen sense is never at fault and who knows his master's sheep wherever they may be.

Imagine a small stone enclosure or pen on some Scottish hillside, near which hundreds of sheep, the property of numerous owners, are grazing together. A shepherd appears with his dog. He owns a certain number of sheep and is desirous of getting them into the pen. They may be scattered over a large surface and are mixed with others whom they exactly resemble. He wouldn't know them if he should see them, but he waves his hand to his dog who is off like a shot and who, barking and bounding and running with speed that never slackens, and endurance that never fails, gradually picks out his master's sheep, collects them in one flock, drives them to the pen and pushes them in at the gate, one by one.

The shepherd counts them and if, as frequently happens, there are any missing, the dog is sent out again, for the bright little four-footed shepherd can't count, though he does look sometimes as if he could do everything but speak. Presently he is seen driving in the missing sheep and keeping him going in a straight line, right through a flock of others, if they happen to be in the way.

Whether this characteristic existed in the remote ancestors of this species of dog, or is simply the result of long training, is of course uncertain, but the writer has been interested to note a proof that it is hereditary now in two beautiful specimens of the pure collie

that are owned by friends in Portland, Maine. When both dogs were quite young, hardly a year old, and before they ever saw a sheep in their lives, as one started to bark at a passing team, the other being given the word, went after him and drove him back.

The topographical instinct in the collie is quite remarkable. A collie pup, about seven months old, was brought from one town to another, several miles apart, and from the latter place to another by train, on two different lines of railway. The puppy ran away from his new home and found its way back in a few days to the old place across a wooded, hilly country with one river, the Don, and several smaller streams to get over.

In this case neither sight nor scent could possibly have been of any practical assistance to the lost dog.

Collies are said to have a way of frequently touching a person they may be walking with in the dark as if to reassure them. "If on a dark night," says Dr. Gordon Staples, "I say to my favorite collie, 'Where are you, Elly?' she comes quietly up and dabs me with her nose."

The topographical instinct of the collie is well exhibited at times in snow storms and mists or fogs in the Highland hills. The life of many a shepherd has been saved by his collie in the following way: The shepherd finds himself lost in snow or fog, and he turns to his dog and orders him to "be off home." He must speak in a pre-emptory tone, almost half angrily, perhaps, else the faithful animal will not leave him. He does leave him at last, however, with hanging head and tail—the shepherd notes the direction, and follows. The command may have to be repeated several times, but ten to one the shepherd, still following his dog, soon finds himself in ground he knows.

It was a clever Scotch collie dog by the name of "Hope," which collected funds in almost every part of Great Britain for the orphan fund of the Amalgamated Society of Railway Servants, and who also visited France, where he also secured money for the same worthy purpose. On one trip, introduced by Mr. Raggett, chief officer of the steamship Brittany, to the vice-consul at Dieppe, this "Railway Dog of England," as he was familiarly called, received in a short time one hundred and thirty-eight francs, and on his journey back collected more than five pounds in bank bills. The noble animal, through the general secretary of the society he represented, soon had on hand numerous invitations, distributed over the leading railway systems. "Help" was trained for his mission by Mr. John Climpson, guard on a night boat train, and during his life time was the medium of collecting hundreds of pounds for the orphan fund.

For thirty-five years his mission was made known by a silver collar, to which was appended a silver medal, having on it the inscription: "I am Help, the Railway Dog of England, and traveling agent for the orphans of railway men who are killed on duty. My office is at 55 Colbrook Row, London, where subscriptions will be thankfully received and duly acknowledged." This faithful and remarkable canine died at New Haven, in August, 1892.

Ground Squirrels Costly.

One dozen ground squirrels that burrowed into an embankment on the Turlock canal in Stanislaus county, Cal., last May caused a serious washout that resulted in upward of \$500,000 loss, according to Henry W. Henshaw, chief of the Government Bureau of Biological Survey.

Mr. Henshaw, in an official statement submitted to Congress, says the squirrels necessitated changing the line of the canal at a cost of \$25,000, the labor of rebuilding occupying three months, and depriving the ranchmen of water when most needed for irrigation, thus entailing an immense loss.

Collectively, according to Mr. Henshaw, there are more than sixty species of ground squirrels, inhabiting 2,000,000 square miles, and the annual loss from these animals is officially estimated at \$12,000,000.

The world is becoming top-heavy to the fancy folks.

A HONEY MOON

ON A FRUIT FARM

A SERIAL BY CHARLES A. GREEN

A Visit to the Parsonage.

"Now you must be good while I'm gone, Harry!" said Jessie laughingly, as she stood in the door, one bright morning, equipped for a walk, "and there is no excuse for your not being good even if I am away, for I have left you plenty to eat. The victuals are in the pantry. And don't let in many flies," she added shaking her finger at him.

"I won't," said Harry soberly. "I'll stand guard at the door, and catch every fly that attempts to squeeze through."

And with the lightness of youth, health and happiness, Jessie sped down the walk, after a lover's good-by which it is unnecessary to describe.

Jessie's destination was the house of the Rev. W. H. Roe, the pastor of the church they attended, between whose wife and herself warm friendship had sprung up. She was considerably older, though still young in appearance and was herself a bride of only two or three years.

Jessie had been invited to spend the day in an informal way, while Harry was to join them at tea. As Mr. Roe was absent the two ladies had before them a long day for the tete-a-tete confidences and chit-chat so dear to congenial feminine hearts.

"Come to my sunny room," said Mrs. Roe, as she took Jessie's hat. "I sit in one room o' mornings," she said brightly, "and here in the afternoons, where it is half-shady and half-sunny, and yonder are the sunsets. I love sunshine."

"So do I," said Jessie. "I don't shut it out of my house for fear a fly will get in."

"There's one more," said Mrs. Roe, and with a feint of chasing it, she merrily led the way to the room she spoke of. Very attractive it was, with its outlook through open door and windows upon a bit of lawn and stretch of garden, with their flickering lights and shadows, and shining leaves from which the dew had not yet vanished.

"Does married life seem to you as your fancy painted it?" asked Jessie after chatting awhile.

"I turn to it as in rest after long weariness," replied Mrs. Roe, "or as one who has been fleeing alone through a forest, from an ambushed enemy, the target of many a gun, dodging from tree to tree, getting in a shot now and then, it is true, but continually harassed. Even if exhaustion overtakes him, he cannot rest; but must be ever on the alert, while trying to do so, and he sighs, 'O, for the abandon of rest un haunted by a fear of disturbance.' Now I am within the army lines, the battle rages still, to be sure; but I am no longer fighting alone, I can rest when necessary and another will watch," and a soft look stole over her face, making it lovely.

Jessie impulsively laid her cheek to the hand lying on her lap.

Shadows.

"It looks very different to you no doubt, life is all brightness and hope before you. Life's shadows have not dropped across your path."

"You must know," she said after a moment, in a different tone, "that I was somewhat beyond youth when I married; a spinster in fact; a maiden lady; a regular old maid, if any one will be better suited to put it that way," and she turned to possess herself of a bit of sewing from her work basket, "though why an unmarried lady is so much older than her married friend of the same age, I never could find out; but so it is, and if she marries at last, why, she has made out to 'catch him.'"

"Catch him!" cried Jessie, indignantly, "that means not that she has been simply natural and agreeable; but she has put forth efforts to appear what she was not, in order to get married. I have often wondered what kind of an idea people have of marriage who can talk so. Do you suppose I could be happy with one whom I had caught? Do you suppose he would be happy with me, would not his respect for me, his admiration, his love, be changed to withering contempt? Or else he would walk through the days sick at heart, when he learned that instead of being sweet, I was ugly; at least, I was not trying to be good; that instead of wishing to add to his happiness, I was

wholly bound up in self; that my ideas of married happiness consisted in being happy myself, regardless of everybody else, and all things else; that I wished to have my own way; that everybody must bow to me."

"It is true," said Mrs. Roe, "that is the practical outcome of some women's lives, and some men's lives as well; in only a few cases so ultra as your words would imply, but so much so that the underlying principle is, not to give, but to take; not even to give and take, and one great reason of these unworthy marriages is it is such a dreadful thing to be an old maid!"

"There are plenty of noble men and women in the world; a happy marriage is an excellent thing, an unhappy marriage is simply—hades! If fitly mated happy lives radiate about them for untold good; simply being happy is for good, because true happiness wishes others to be so also."

"Does not a single life tell for good also?" said Jessie.

"Yes," replied Mrs. Roe, "but you know in union is strength, and the strength or wisdom that one lacks may be, and in the cases mentioned is supplemented by that of the other."

"Speaking of catching a husband, did you ever think what a difference there is in the comparative latitude allowed a widow? She is at perfect liberty to captivate a man where an old maid is trying to catch him. A widow may be sweet and pretty; but did you ever hear of a sweet old maid?"

(Continued Next Month.)

New York State Grape Growing.

The Chautauqua grape belt, in the Lake Erie valley, is about fifty miles long, hemmed in on the south side by a ridge of hills, and the breadth of the valley available for fruit culture varies from three to five miles. Through the center of the valley runs a zone of gravel once the beach of the lake when it discharged into the Mississippi valley through the gap where Chicago now



stands. Between this beach-level and the present shore of the lake there is a belt of clay, and on the hillside a zone of glacial till. The gravelly land was once the highest priced and bore better crops of grain, the clay was the best grass land, and the hillside was a sheep pasture covered with mulleins and briars. At first the gravel was thought the most eligible for grapes, but now vineyards are found on the clay and the glacial drift, on which latter place the grapes are as good in quality and sometimes yield as much in quantity.

Pruning Apple Trees.

As it is the season of trimming orchards I wish to make a few suggestions on the subject. This is one of the most important parts of orchard work. A man that does not understand how a tree should be trimmed may go and do a good many dollars worth of damage in a very short time. Yet, how many farmers we find sending their hired men to do this work, men who have not the slightest idea of how the work ought to be done, says Prof. Frazer, N. Y., in "Rural Life." As we go through the country we find orchard after orchard that has been ruined by cutting out large limbs and leaving stubs from one to three inches long, which immediately commence to decay, finally reaching the heart. If it is necessary to remove a large limb which is not often the case, unless it is dead, a sharp saw should be used, and the cutting should be done close enough so that the wound will heal over readily.

Apple trees should be kept well thinned out, not by cutting out large limbs, but by getting into the tree and



THE fruit grower or trucker who uses an International Commercial Car "gets there" quicker and more often than the man who uses horses and wagons. The International makes two to four trips while the horse-drawn vehicle is making one. The man who uses an International goes whenever and wherever he pleases, regardless of road or weather conditions, while the man who uses horses and wagons must wait for good roads and good weather. The

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saves work, time, and money, thereby adding to your profits. All in all, considering the matter carefully from every point of view, you will find that you must have an International Commercial Car if you are to attain the greatest profit from your possibilities. Get all the facts—read what the International has meant to others—actual facts and figures, not theories. See the IHO local dealer and inspect one of these cars, or send for catalogues and information.

INTERNATIONAL HARVESTER COMPANY of AMERICA
Chicago (Incorporated) USA



GREEN'S SURPRISE COLLECTION IN SHRUBS

13 Flowering and Foliage Shrubs and Vines



YUCCA FILAMENTOSA

- 2 Althea, 2 Spireas,
- 2 Deutzias, 1 Weigela,
- 1 Purple Barberry,
- 1 Golden Elder,
- 1 Snowball, 1 Yucca,
- 1 Golden Willow,
- 1 Clematis Paniculata.

13 Extra Strong Specimens ready for blooming first season.

Bargain Price for Spring, 1911, is \$1.60. (Catalogue Price is \$3.00.)

GREEN'S BARGAIN OFFER OF SHRUBS—We offer 13 flowering shrubs which are hardy enough to succeed almost anywhere, all for \$1.60, to go by express. These plants are too large to go by mail as they are two to three year old shrubs of blooming age. You pay cost of expressage. Plant these 13 shrubs two feet apart in a bed on the border of your lawn, and

you would not have them removed for \$25. Some one of these plants will be in blossom nearly all summer. The Barberry will hold its bright red blossoms nearly all winter, so that this bed of flowering shrubs will be a thing of beauty all the year.

THINK OF THIS, A BED OF FLOWERING SHRUBS FOR \$1.60!

Mr. Green makes this liberal offer to induce you to beautify your home ground by planting ornamental shrubs and trees more largely than formerly. Your farm or rural home will sell for hundreds of dollars more if beautified with \$5.00 or \$10.00 worth of vines, shrubs and trees.

Address, **GREEN'S NURSERY COMPANY, Rochester, N. Y.**

When SPRAYING FRUIT TREES, Use STANDARD LIME-SULPHUR HYDROMETER

Approved by all Agricultural Experiment Stations for gauging the strength of the Spraying Solution.



Complete, by Mail, with Test Jar and Instructions, \$1.00. Favorable Terms to Active Agents. CARBONDALE INSTRUMENT CO., CARBONDALE, PA.

cutting out all dead limbs and all small limbs crossing each other, giving the top a thorough thinning out, cutting all suckers and limbs close to the tree. At the base of these suckers or sprouts there are two buds, so if we do not cut them off close to the body of the tree, the next year we will have two sprouts in the place of the one we cut off. Do not leave any hat-pegs on the tree; if you do they will decay, the tree not being able to heal them over. If apples are wanted, every year is none too often to go through the orchard and trim out all broken and unnecessary branches.

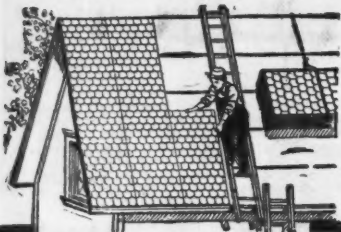
SNAP LOCK BRACELET & RING Free

Beautiful Gold Plated Bracelet set with sparkling gems, and handsome Silent Ring, both FREE for selling 20 pages Art Post Cards at 10c. a pkg. We trust you. Write to-day for 20 packages. Regal Mfg. Co., Dept. B 594, Battle Creek, Michigan

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We positively give to BOYS and GIRLS a BEAUTIFUL American-made stem-wind watch with sparkling diamonds, GUARANTEED 5 YEARS. Also a handsome ring, set with three sparkling stones, for selling 20 jewelry articles at 10c each. Order jewelry today. When mail send \$2 and we will send watch, ring and chain. We guarantee Satisfaction. Dale Watch Co., Dept. 20 Chicago. Please mention Green's Fruit Grower.

Buy This Money-Saving "REO" Steel Roof



Saves its cost five times over. Fireproof. Lasts longer than building. Never needs repairs. Out-wears four wood shingle roofs. We save six times as long as 3-ply composition roofing. Reduces fire insurance rates 10% to 20%.

Edwards "REO" Steel Shingles

are easy to lay. Just hammer and nails. No soldering. No tarring. Comes in stamped sheets of finest Bessemer Steel, 6 to 12 feet long, width 24 inches, either painted or galvanized.

Buy at factory-to-user prices. We pay the freight. We are largest makers of iron and steel roofing. Ask about our \$10,000 Guarantee Bond Against Lightning. Write today for our new Free Money Saving Catalog 451. Send us the dimensions of your building.

THE EDWARDS MANUFACTURING CO.
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108 Square Feet of Brand New Strictly High Grade RUBBER or FLINT COATED ROOFING

One-ply . \$0.45
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Write for our FREE Booklet of Roofing and Building Materials at prices never before heard of.

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AGENTS MAKE \$30 PER WEEK

SEE THAT REEL

THIS AWL SEWS a Lock Stitch like a machine. Just the thing for repairing Shoes, Harness, Buggy-tops, etc. Sew up Grain Bags, Tents, Awnings, and Wire Cuts on horses and cattle. Makes a neat, durable repair and quickly, too. Has a diamond point, grooved needles, a hollow handle, plated metal parts, and a reel holding 24 yards of waxed linen thread. No extra tools needed. Can be carried in any tool case or the pocket. Special discount to agents. One man sold \$200.00 worth in four days. M. Neal sold 20 in five hours, cleared \$12.50. Had no experience. Regular price \$1.00. Complete sample with one large, one small, one curved needle and reel of thread, sent postpaid for 50c. 2 for \$1.00. Get one, keep it, work it two, use up all the thread, mend all your old harness, etc., and then if you are not satisfied return the Awl and we will refund your money without a word. Send quick for sample and complete instructions.

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Sell the Automatic Combination Tool in your home county and earn \$12 daily. It will stretch all fencing, pull posts, lift heavy loads, adjust machinery, also used as Press, Vise, Wrench, etc. Made of Malleable Iron and Steel. Weight 24 lbs. Capacity 6,000 lbs. Guaranteed for one year. Useful the year round. We give you a free ten day trial. Send no money but a card today, name, and get our special offer to live agents. No experience necessary. We teach you free how to make sales. Ask quickly and name County in which you reside.

AUTOMATIC JACK CO. 36 Main Street, Bloomfield, Ind.

Watch, Ring GIVEN AND CHAIN
FOR SELLING THIMBLES AND NEEDLES
We positively give a genuine American Watch, beautifully designed case, warranted time-keeper, 5-YEAR GUARANTEE, sparkling set or plain ring, all for selling 20 Silver Thimbles at 10c each. 100 of Gold-Eye Needles Free with each Thimble. Easy to sell. Write for them. When sold return the \$2.00 and we will send the watch and ring. Ladies' don't miss this. **CHAS. A. GREEN'S NURSERY CO.**

850,000 GRAPEVINES
69 Varieties. Also Small Fruits, Trees, etc. Best Rooted Stock, Genuine, cheap, 2 sample vines mailed for 10c. Price-list free. **LEWIS ROESCH & SON, Box 12, Fredonia, N. Y.**

"Thirty Years With Fruits and Flowers"
Chas. A. Green's new book tells how one acre in fruit can be made to yield you more money than five acres planted in grain. Sent free with a handsome 1911 catalog of high grade vines, plants and trees, at wholesale prices. 100,000 Private Hedge for sale.
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FREE Murray Style Book
We want our 1911 Catalog in the home of every Farmer in America: 178 pages of genuine Buggy, Harness and Saddle bargains; 201 illustrations; 188 styles Vehicles; 78 designs in Harness. Biggest and best book ever printed. Murray "Highest Award" Buggy Direct from his Factory; 4 weeks' road trial; 2 years' guarantee. Send for this Big Free Book today.

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Please mention Green's Fruit Grower.

Farm and Garden.



Good roads are the cheapest in the end. Poor roads—roads that receive no care, discourage business and wear out the patience of the farmer, his wagons, horses and harnesses. It pays to have good roads in any community.

The Old Farm Moo-o.

Written for Green's Fruit Grower by S. E. Bowers.

I wish I was back on the old farm. The scene of my childhood's days, Where the willows bend and whisper, And the brook sings tender lullabies; Where the faintest cry is echoed From the hill-tops far away, And a subtle, gentle perfume Exhales from the new-mown hay. Where the water shines most placid 'Neath the well sweep's towering height, And a chair on the broad piazza waits, Gives me welcome to the sunlight. There I have watched the working Of the good old fashioned churn, And have seen the butter coming Beneath its rhythmic turn. I'd love to hear the sounding Of the horn that called to meals, Bringing tired and weary workers From their toiling in the fields. But the best and sweetest calling Came from o'er the pasture bars When the dusky gloom was falling And shone the twinkling stars: It pierced the hazy twilight through: Moo-o! Moo-o-o-o! Moo-o-o-o-o!

Farm and Ranch Notes.

The California fruit growers do not have to be told that advertising pays. They are spending \$70,000 in advertising their oranges and they do not do it for fun.

W. H. Underwood, of Hutchinson, Kansas, has secured 19,500 heaters to protect a square mile of orchard from frost this spring. His stoves have a reservoir each holding ten gallons of oil which ought to be sufficient to illuminate all outdoors.

Richard W. Sears, of the firm of Sears, Roebuck & Company, has sold his half interest in the business for \$25,000,000 and will retire to a farm which he owns at Gray's Lake, Illinois. Several years ago Mr. Sears was a telegraph operator at Redwood Falls, Minnesota, at a salary of \$50 a month, and there conceived the idea of a mail order business, which has permitted him to retire from active business at the age of forty-five with a princely fortune.

Cement will be most largely used hereafter for the floors of out-buildings. It does not cost one-half as much to make a cement floor as most people think—at least in this country where sand and gravel are plentiful. Any handy fellow can make a cement floor and the talk of requiring an expert to do it is all bosh. I made a cement floor in our dugout a good many years ago and the floor stands to-day as solid as ever, with not a crack in it. It is only a question of putting down pounded rock from three to five inches deep, mixing one part of Portland cement to four parts of sand while dry, then wetting it up the same as in making lime mortar, and dumping it over the rocks, smoothing it down even with a common trowel.

Orchard heaters are no longer an experiment and no plantation that is worth money should be without this insurance. The cost of equipping an orchard with fifty heaters to the acre is about \$25 the acre. It is rare that it is necessary to use these more than thirty or forty hours in any one season. They will burn about 350 pounds of coal to each fifty heaters in an hour and when coal is a cheaper fuel than oil they can be profitably employed. One man can attend about two and a half acres. The heaters are not difficult to manage, although one should practice a little in kindling the fires quickly. Dry prunings make good kindling. An electric frost alarm can be purchased which will record the temperature in the orchard and sound a gong in the house when the temperature falls to the danger point.

The northwest is furnishing the best table apples seen on the Denver market this winter and if there is anything in the presence of the thoughtful attitude some of us ought to be paying a little more energetic heed to this aggressive fact. The popular varieties from the land where rolls the Oregon, as our old school readers had it, are the Spitzenburg, Yellow Newtown, Oregon Red Winter, King, York Imperial, Ben

Davis and Red Cheek Pippin. Botanically speaking we are not acquainted with the varieties called the Oregon Red Winter and the Red Cheeked Pippin for we have not examined them critically, but can say that they are both flashy fruit calculated to attract the eye of any buyers who may come along and this more than any other quality is the thing that sells apples. The main fault with northwest apples is that they are too large for practical purposes and for this reason they would be disqualified in any great show where real judges were working on the awards. The trade does not want big apples for the people will not buy them in this country, but in England they are quite the thing.

The Early Garden.

There is not a better way to begin to plan one's garden than to do it on paper. Make a scale drawing of your premises—that is, a diagram of the shape of the lot, letting each inch represent as many linear feet, in accordance with the actual dimensions of the plot. Next, draw in the roadways, if there are any, the paths, and the walks, marking the location of shrubbery and trees. With this sketch before you, proceed to lay out the ground plan of your garden-to-be. Remember that the flower garden should have a position where plenty of sun will reach it both morning and afternoon; thus seek a southern exposure if possible. While a southeastern slope is an ideal location for a vegetable garden, vegetables will thrive in many places where flowers would not do so well. The soil will, to a great extent, dictate the garden's location with many, although the summer and fall months can be given over to developing and enriching the soil by fertilizers, where it is less rich than it may be in some less suitably located position. Do not make the mistake of planning a larger garden than you can take care of, for nothing is a more dismal sight than that of an over-ambitious garden that it has been impossible to live up to.—Gardner Teall in "Harper's Bazar."

Slopping Cattle.

You may be surprised, but you need not be alarmed, at the statement of a Kentucky newspaper that Mr. Simon Well, of that state, is at present slopping 3000 head of cattle, says New York "Mail." It doesn't mean that Mr. Well is splashing mud or slush on his live stock, or that he has driven his herd into a swamp. The term "slopping" is a local one, and as used in the present instance it signifies that Mr. Well is feeding his cattle on slops, the steamed grain from which the neighboring distilleries have extracted the alcohol. The size of Mr. Well's herd, which is valued at \$35,000, indicates that slopping cattle in old Kentucky is a somewhat profitable business.

Putting Manure on the Land.

This may be hard work, but what is there which pays as well and comes as near being sure pay? It is a sure thing that every shovel of manure you throw out will increase the crops on that spot of ground for several years to come. The most practical plan of handling manure is to get it out as fast as made, hauling out daily or each week and scattering. This is much better than putting in a pile and allowing to weather for months. If scattered on top the soil it soaks down in and the soil by nature holds it.

Who does the feeding when the team comes in from a hard day's work or a long drive?

The question of watering is most important, and should never be trusted to ignorance or chance.

Irregularity in time of feeding and quantity will cause indigestion.

Clean stables and good floors are a necessity to sound feet and legs.

This Wagon is Free

From Expense

It's the wagon without breakdowns or repairs, the wagon you buy to last your lifetime. It cannot dry apart, or rot, or go to pieces. Before you buy a wagon of any kind send for catalog and know all about the light-running



ELECTRIC Handy Wagon

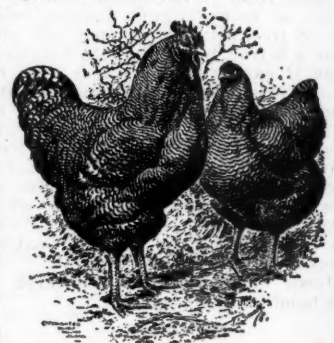
Its solid steel wheels are not the ordinary kind. Spokes cast in the hub, hot riveted in the tires. They never can work loose. No tires to set. It cannot "go to pieces." You ought to know all about the Electric Handy Wagon—the road maker instead of the road renter, the wagon that makes farm work easy. Our free book will interest you and tell you all. We want you to have it. Write and ask us to send it—do it to-day.

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SINGLE COMB BROWN LEGHORNS

The Popular Leghorn.—The acknowledged queen of the practical egg-laying breeds is the Leghorn, when judged by the standard of the greatest number of marketable eggs produced at least cost. Not only are the hens persistent layers, but they are extremely active foragers and waste no time in setting. Like a good milch cow they put little fat upon their bones, but devote all surplus nourishment to steady production. They eat less than the heavy breeds, but whatever they consume is put to good purpose. Price of S. C. Brown Leghorns and B. F. Rocks, all one price.



BARRED PLYMOUTH ROCKS

This breed is as solid as its name and is often called the "Farmer's Friend," the "All 'Round Fowl," the "Old Reliable." It is the bird for business, and deemed by many the best fowl for farm and home raising. It is not only a good layer, but is quick to develop for the early market. As a far-sighted farmer once said to us, "When you kill one you've got something."

PRICE OF BIRDS OF ALL BREEDS:
Cockerels, \$2.50, \$3.00 and \$5.00 each; Pullets, \$2.00, \$2.50 and \$3.00 each; Trills, \$2.00, \$3.00 and \$10.00. We ship no cull birds. The lowest priced birds offered are standard bred, practically as good for breeding purposes as the higher priced birds. The \$5.00 birds offered are the pick from the flock containing the largest percentage of standard points and therefore commanding a higher price since it makes them eligible for show purposes.

PRICE OF EGGS FOR HATCHING FOR ALL BREEDS:
From good breeding pens, \$1.00 per 13; from our best breeding pens, \$2.00 per 13. While we do not guarantee the fertility of our eggs we are willing to replace all settings from which the purchasers receive less than six chicks, at half the price paid.

GREEN'S NURSERY COMPANY,
ROCHESTER, N. Y.

BRACELET AND RING FREE

We positively give from a fine Adjustable Signet Bracelet, guaranteed 5 years, also a beautiful Stone Set Ring for selling 20 packs high-grade art post cards at 10c a pack. Order 50 packs, when sold send us \$2, and we will positively send

Bracelet and Ring. **WELLS MFG. CO., Dept. D-17, CHICAGO**

Spring Goblins.

The butterfly 'll catch you if you don't watch out.
The linnet and the robin and the whole fine rout;
The bumblebee 'll bite you, the first thing you know.
The dainty, saintly snowdrop will peep through the snow.

All kinds of mysteries moving in the air.
Shadows of a golden girl on a bloomy stair;
Must be Lady April, with her smile and her rain.
Hiding where the wind blows down the lilac lane.

—Baltimore "Sun."

Lessons in Corn—Remarkable Results Achieved by Boys

The duly attested reports for 1940 show that one hundred boys secured an aggregate average of 133.7 bushels an acre. One South Carolina boy attained the enormous yield of 228.7 bushels on a single acre, two others raised 200 bushels, and eleven made more than 150. These results represent nine southern states and more than eighty different post offices, and indicate without question the possible development of a highly profitable corn-growing industry in many regions not heretofore supposed to be especially adaptable to that purpose, says the New York "Post."

A generation ago most farmers simply went to the crib, when planting time came, picked out fair-looking ears, shelled them, and planted them without further ado. As they generally failed

Gasoline Engines on Farms.

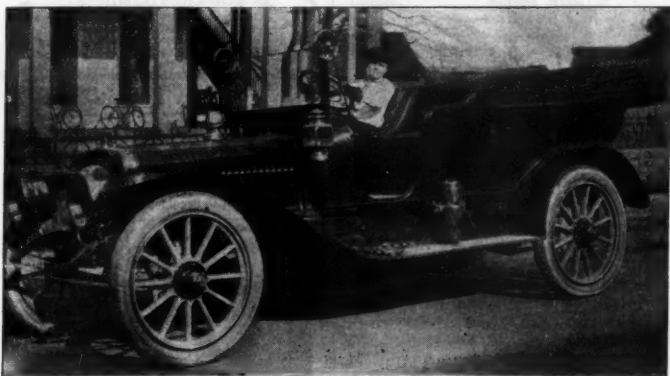
George Ethelbert Walsh, a writer in "Harper's Weekly," says over 250,000 gas engines are working on farms in this country. "These engines," he continues, "have displaced, it is estimated, at least half a million horses and mules, and reduced the 'hired man' problem to an irreducible minimum."

He then says that "the substitution of steam for horsepower on our farms was of value only to the big bonanza farms." The small farmer could not afford the expense involved in the use of steam, but the gasoline engine just fits his case, and all over the country farms of from fifty to one hundred or more acres now have gas-explosion engines installed on them to do much of the work formerly requiring hired men and horses. These engines range from three to five horsepower up to from fifty to sixty horsepower.

The work they do is varied. Small ones are employed for churning, pumping water for stock, cutting hay and fodder, sawing wood, shelling corn and operating sewing machines. Larger ones are used for cutting corn for ensilage, grinding feed and threshing.

On the big farms of our own and the Canadian northwest, large traction engines are employed, and the huge grain crops of that region are threshed with the power they supply.

The interest farm boys show in these engines is such that it is believed they are keeping many boys with a mechan-



This is a photo of Edmund Travis, Jr., of Hattiesburg, Miss., and of his automobile. Edmund is just thirteen years old. The leading daily paper was trying to stop children from running autos, when Edmund phoned around to him, asking him to take a ride with him. After that he had nothing to say on the subject.

to get a "stand" the first time, "re-planting" was almost as regular a feature of the year's work as the original planting. Too many are doing the same thing yet, but such of these lingerers as are drawn into this exposition will learn that there is another way.

They will be told to go into the field of standing corn before it is ripe and pick out the stalks from which the next year's seedling is to be done. They must see to it that the ears from these selected stalks are properly dried and cared for during the winter, that the vitality of the germs may not be weakened or destroyed. And as planting time draws near they must actually test a few grains from each ear, and, unless every one of them sprouts, discard the ear.

If all this strikes the farmer as nonsense he will be shown attested statistics proving by repeated experiment, under varying conditions, that the farmer who has been willing to take this trouble has received several dollars' worth of corn an acre extra for his pains. And, perhaps, this will interest him sufficiently to cause him to notice another exhibit, closely related. Here are five pairs of wire baskets, one in each pair showing corn roughly indented on the back of the grain, while that of the other basket is smooth. To most people that would show only that corn of the same variety was sometimes rough and sometimes smooth, but in four different counties of Ohio men have gone into the matter deeply enough to learn that with the same soil and cultivation the smooth ear has beaten the rough in weight of yield by more than two bushels an acre. And by that time he may be wide awake enough to see that this exhibition was not intended merely to relieve his purse of its cash in return for a day's entertainment, but that it has for him scores of new ideas, any one of which, if intelligently worked out, may mean just the difference between profit and loss in some farm operation of the coming year.

Old gilt, such as the gilded frames of chairs, or old picture frames and mirrors, if they do not require regilding entirely, may be brightened by using an excellent mixture of three ounces of white of egg and an ounce of chloride of potash or soda. This should be painted over the surface with a feather or a water-color paint brush.

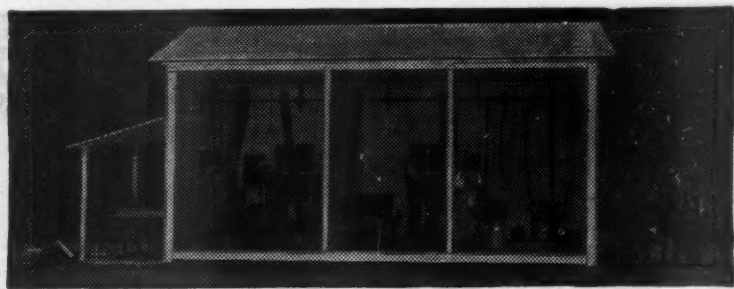
Hay and grain of poor quality.
Harness stripped off roughly, and horses rushed into stalls without rubbing, cleaning or sponging.
Bran mash not given—too much trouble.

Hay loft dusty and dirty.
Stable full of cobwebs.—"Farm News."

Points of a Bad Stable.

Hay and grain of poor quality.
Harness stripped off roughly, and horses rushed into stalls without rubbing, cleaning or sponging.
Bran mash not given—too much trouble.

Hay loft dusty and dirty.
Stable full of cobwebs.—"Farm News."



Multiply Your Profits With This Proved Farm Power

YOU have invested a certain amount of money in your farm machines—your separator—fanning mill—ensilage cutter—pump. To make that investment pay dividends, these machines must be operated at highest efficiency and the least possible cost.

Years of splendid service have shown that the most efficient operator of farm machines is an

I H C GASOLINE ENGINE

All I H C engines are conservatively rated—each engine easily developing 10 to 30 per cent more than its listed horse power.

The I H C is simple—its parts few and strong. This makes it easy to clean and keep in good condition, and gives it lasting qualities not to be found on more complicated engines.

I H C Gasoline Engines are built in all styles and sizes 1 to 45-H.P. vertical and horizontal—stationary, portable, or tractor.

No matter what work you want done, there is an I H C to do it. See the I H C local dealer and pick out the engine you need. Get it to work saving you time and money and increasing your production. If you prefer, write direct for catalogue and full information.

IHC Service Bureau

The purpose of this Bureau is to furnish farmers with information on better farming. If you have any worthy question concerning soils, crops, pests, fertilizer, etc., write to the IHC Service Bureau, and learn what our experts and others have found out concerning those subjects.

International Harvester Company of America

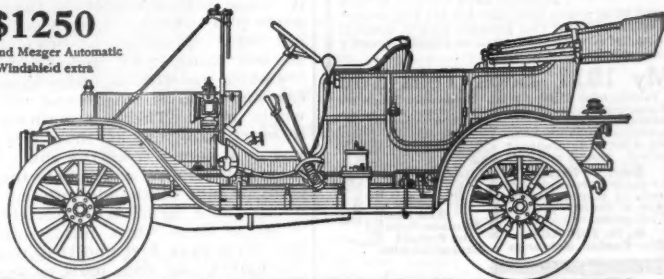
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Chicago U.S.A.

Reo

\$1250

Top and Mezger Automatic Windshield extra

New York to San Francisco
10 days 15 hours 13 minutes

steady going every day and not a wrench touched to the Reo engine.

That's your answer to every question you can ask about the Reo.

The Reo must have speed and power, to keep going like that over the bad roads and hard climbs found in the Great American Desert and Rocky Mountains.

The Reo must have strength, to stand the constant and tough strain.

The Reo must be reliable. A car that stands a test like that, and then breaks the record from New York to Los Angeles, and then the hill-climbing record up Mt Hamilton, and then the record from Topeka to Kansas City, and still is in perfect condition—that is perfect proof of reliability.

Comfort? Prove it yourself. Get the nearest Reo dealer to take you for a ride.

Send for catalogue and "Reo and the Farmer". Plain facts.

R M Owen & Co Lansing Mich General Sales Agent for Reo Motor Car Co

Father Knew.—Curious Charley.—
"Do nuts grow on trees, father?"
Father.—"They do, my son."
Curious Charley.—"Then what tree does the doughnut grow on?"
Father.—"The pantry, my son."

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FRUIT FARMS. Good soil, long growing season, mild climate. Books, map and information. Address with stamp.

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100 EGG HATCHING WONDER 750 DELIVERED

to any R. R. station east of the Rockies and North of Tennessee. Write for special price list elsewhere. Machine is 26 in. long, 21 in. wide, 31 in. high, with a clear top which can be used as a table. It has triple walls, nursery, chick drawer, egg tray, lamp, burner, thermometer, chimney, funnel, aluminum coated tank, etc. And it is made right, too—no cheap materials used. We use seasoned lumber, nothing cheap about it except the price. We even put a heavy coating of aluminum into the tanks and boilers. You can be almost sure of a 95% hatch. We have thousands of testimonial letters to bear out this statement. Catalogue of larger machines free. Write today.

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112 PAGES
Practical Poultry Raising Experiences

for Poultry Houses, how to make a first-class brooder out of a piano box. Describes the 1911 Sand Tray Prairie State Incubators.

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Johnson says tell you to sure send your name this time for his 1911 price—less than \$10 for Old Trusty, freight prepaid (East of Rockies)—based on 100,000 capacity and only 7% profit.

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Take \$30, 60 or 90 days' trial. Remember Johnson's 10-year guarantee on Old Trusty. Covered with asbestos and again covered with handsome sheet metal. 80% or better hatches guaranteed. Simple and sure.

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My big 1911 book has hundreds of photos. Every page a poultry sermon. Write postal to
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Please mention Green's Fruit Grower.

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Successful Incubators have always been superior to all others. This year they are better than ever before and the price is lower. Get our direct-to-you proposition and Big FREE Book and low price before you pay a cent for any incubator. We want to prove to you that this is the biggest real value ever offered.

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Both Incubator and Brooder for \$10

You can't get bigger value at any price. And I pay freight. The famous Ideal is metal covered all around, top, bottom, sides and all. Self regulating, self ventilating. Simplest, surest, safest, most economical hatchery made. And the Ideal Brooder raises the chicks. Price for both 120-egg incubator and 120-chick brooder, \$10. I pay freight on east of the Missouri River and North of Tennessee. Write for delivered prices beyond, or if you want larger size. Send name anywhere new on a postal for my big Free Book—a guide to bigger profits. Read what others say about Ideals. Address
J. W. MILLER CO., Box 40, Freeport, Ill.

125 Egg Incubator and Brooder Both For \$10

If ordered together we send both for \$10. Freight paid east of Rockies. Hot water, copper tanks, double walls, double glass doors. Free catalogue describes them. Send for it today.

Wisconsin Incubator Co., Box 64, Racine, Wis.

"CHICK CULTURE"



How We Started Poultry Raising.

Mr. Chas. A. Green: We started in the poultry business in the spring of 1888 with one incubator, a home made one, and a few Brown Leghorn hens and a cockerel and our first hatch was a success, so we felt like keeping on. We made our own brooders, which acted all right. We just use common flat glass lamps under our brooders and never have had any accident with any of them. We kept Brown Leghorns for several years, then we changed to the White Leghorn breed, and like it better. They are a little larger and lay a larger egg, with a whiter shell which sells better and that is our aim, to sell eggs. We keep a flock of two hundred hens. We get eggs the year round. In the spring we get as high as ninety-five or one hundred dozen per week. We do all our hatching with incubators. We have two home made incubators and six others that are heated with lamps, the home made ones are kept on the porch and the water is heated in the kitchen on the range. My incubators are all hot water system, they are far superior to hot air machines. I hatch about four thousand chicks and turkeys together each year. I sell one day old chicks and it pays me well. Some incubators are much better than others and when you have a good incubator and fresh eggs and do your duty in tending to it, well, you will have sure hatches without fail. Incubator work is a good work but it must be done regular and it must be done right if you want to be successful. I have had much experience with incubation and find where all these conditions are complied with the incubator will beat the hen almost every time. One person can tend several hundred chicks in a brooder house with less trouble than a half dozen old clucks. Last year we put 340 baby chicks in our brooder house at one time. We fed them bread crumbed up with a little hard boiled egg and a little wheat and give them whole milk. There is nothing better to start baby chicks than sweet milk just as it comes from the cow. We fed every two hours and when they were eight or nine weeks old only six of that number had died. We don't give much water to them when quite young. We give them milk first and they will thrive like calves. All cups must be kept clean and a stone or something kept in them so they can just stick their bills in the milk, or they will get milk all over themselves and it will make them nappy, and they will not do well. We keep clover chaff on the floor and sand and a little wheat in it and then they keep busy and grow right along.—Mrs. Ella M. Kline, Va.

Preserving Eggs.

The logical time to put eggs away is in March, April, or May, when they are cheap. It is advisable to do it as early as possible, before the temperature is high. They must be unquestionably fresh. The ideal way is to drop them in the solution as soon as they are brought from the nest. When this cannot be done one should secure them not more than three days after they are laid. Soiled eggs, cracked ones, or those that have been washed, cannot be used, says "Harper's Bazar."

Silicate of soda is a thick, syrupy liquid sold by the pound at drug stores. In ten-pound lots the price is usually ten cents per pound for the best grade. Ten pounds will make enough solution to cover fifty dozen eggs, making the cost two cents per dozen. There are three grades of silicate of soda on the market. An inferior quality costs a trifle less than the best, but the saving may result in loss of eggs.

To prepare the solution, stir one part of silicate of soda into sixteen parts of water that has been boiled, cooled, and measured.

Use Western Style.

The western style of handling chickens is soon to be introduced to this section of the country. Most persons have an idea that the newly hatched chick is a trifle more fragile than the shell it has just left, they are quite wrong. On the western side of the con-

tinued it is already a well established business to take these chicks before they are more than an hour or two old, pack them in cardboard compartments a trifle larger than those which are needed for eggs and send them by express to customers anywhere within a distance of thirty-six hours.

No food is needed and no water, for nature has kindly arranged that new chickens require neither for at least thirty-six hours and that they are more healthy for being allowed to go hungry.



The Incubator.

The incubator is to the poultry raiser what the horse and the self-binder is to the hay and grain grower, and all who have given it anything like a fair trial, will willingly bear testimony to this. One good sized incubator will do the hatching, which, if done by hens, would take up the time that would represent the laying of over nineteen dozen eggs' worth, in round figures, from three and a half to four dollars at moderate market rates for good fresh eggs for table purposes, while if produced by high class pure bred fowls, they would be worth double or treble that sum at a low computation, says the "Canadian Sun."

Then, again, the life of a good, well-made incubator, properly taken care of, is such that it need hardly enter into the farmer's calculations, and it is safe to reckon that the time spent by the hens in doing the work of one incubator, after the farmer had furnished them with the eggs would cost the equivalent of 200 chickens already hatched.

In considering the incubator and its bearing on poultry production, however, one must take into consideration that the use of the incubator and the brooder is the inevitable outcome of thought and system in poultry raising, and must of necessity count for much. The poultry raiser who even takes a serious view of the proposition cannot fail to be impressed at once with the folly of permitting the hens to do the hatching and brooding. This is the beginning of the introduction into poultry raising, and it takes into its wake regulations and restrictions which mark the difference between profitable and unprofitable poultry production.

Must be Kept Clean.

First, they must be kept free from vermin, dirt and disease germs of all sorts, and they must be so arranged that the eggs will come out of them absolutely clean and free from soiling. The nests are so arranged that the poultryman knows not only the age of his eggs, but the identity.

The use of the incubator reduces the poultry business to something more closely resembling an exact science than usually characterizes farming operations, no matter how carefully they happen to be conducted. It enables the farmer to work out experiments in breeding and mating his fowls and thus encourages and facilitates the material improvement of flock, generation after generation, by the reservation of the best producing individuals and their offspring for breeding purposes. The poultryman is enabled with accuracy to trace the breeding of his fowls, and thus insure straight line breeding while making desirable family crosses of individuals within the tribal lines. It also enables him to protect his flock from the very undesirable effects of close and continued in-breeding, and this would be nearly, if not quite, impossible without the incubator.

15⁹⁵ AND UP- WARD AMERICAN SEPARATOR

SENT ON TRIAL, FULLY GUARANTEED. A new, well made, easy running separator for \$15.95. Skims hot or cold milk; heavy or light cream. Different from this picture which illustrates our large capacity machines. The bowl is a sanitary marvel, easily cleaned. Whether dairy is large or small, obtain our handsome free catalog. Address
AMERICAN SEPARATOR CO., Box 1121, BAINBRIDGE, N.Y.



140 EGG INCUBATOR and 140 CHICK BROODER Both For \$10

The incubator is made of wood, covered with asbestos and galvanized iron; has triple walls, copper tank; nursery, egg tester, thermometer, ready to use. 30 Days' Trial—money back if not O. K. Write for Free Catalog today.
Ironclad Incubator Co., Dept. 27, Racine, Wis.

WE SAVE YOU \$5 TO \$7 On Your Incubator and Brooder

Before you pay any price to anybody, write us quick for our starting offer on highest quality machines made. A real hatchery in a brooder at a price that makes this the biggest genuine bargain of the year. BEST RESULTS and BIGGEST PROFITS for owners. Wait till you get our book and price before you buy. Address
The United Factories Co., Dept. X 18, Cleveland, O.

Chicken Business 30,000 Baby Chicks

Single Comb White Leghorns, Single Comb Brown Leghorns, Rose Comb Brown Leghorns, Barred Rocks. Send for circular.

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We are breeders of Leghorns and have the finest line of cockerels and pullets that we ever produced. We offer, for the low price of \$5.00 each, such birds as fanciers would sell at \$10.00 and \$15.00. Good breeding birds, \$2.50 each. For particulars address Green's Nursery Co., Poultry Department, Rochester, N. Y.

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Tells things about squabs you never knew before; tells why they are greater money makers than chickens and much less trouble. Best profits in squabs than in any other kind of live stock; raised anywhere in one month. All told in handsomely illustrated free book. Write today and it will be sent by return mail.

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90 VAR'S All breeds Poultry, Eggs, Ferrets, Dogs, Pigeons, Hares, etc. List free. Colored Des' of 60 page book 10c. J. A. Bergsy, Box 3, Telford, Pa.

64 VAR. POULTRY, SALE REASONABLE. No better bred stock. Catalogue and show record free. H. D. ROTH, SOUDERTON, PA.

POULTRY 35 Best Breeds. Bred for laying; eggs for hatching a specialty. Large circular illustrated in colors free. JOHN E. HEATWOLE, Harrisburg, Va.

BEST POULTRY AND FRUIT MAGAZINE published. 25 cents a year. Descriptive literature free. AMERICAN HEN MAGAZINE, Council Bluffs, Iowa.

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EGGS PEARL GUINEAS Indian Runner Ducks, Barred Plymouth Rocks and Mammoth Bronze Turkeys. Write for free price list C. ADDELL KAYNER, WEST FALLS, N. Y.

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TOOLS FOR CAPONIZING FOWLS FOR SALE, with full instructions for their use. Address, GREEN'S NURSERY CO., Rochester, N. Y.

Greider's Fine Catalogue of pure bred poultry, for 1911, over 200 pages, 57 colored pictures of fowls, calendar for each month, illustrations, descriptions, photos, incubators, brooders, and all details concerning the business, where and how to buy fine poultry, eggs for hatching, supplies, etc., at lowest cost. Send 15c. D. N. GREIDER, Box 90, Rheims, Pa.





Green's Fruit Grower: Enclosed find photograph of good hen house for city lot. It is eight by twenty-four feet, divided in three sections, making three pens eight feet square. For sits I used three by four framed with two by three to which I nailed six-inch matched boards. Material, including paint, cost me about \$35. I did all the work myself although I am not a carpenter. The cost and labor can be reduced by using paper for the roof instead of shingles. —Geo. J. Carson, Conn.

A Word to the Poultry Beginner.

Written for Green's Fruit Grower by A. G. Symonds, N. H.

"A word to the wise is sufficient," but a word to the beginner in poultry keeping is a necessity. Few entering the poultry business have any idea of its nature and scope. If a few hens can be purchased—any variety will do—and something in the shape of food is thrown them several times a day, the novice thinks he has the business down "pat" and no one can tell him how to keep hens.

How absurd for one to start in any business without preparation! Think how long it requires to learn a trade or a profession. It is the same with a business, it takes a long time to become familiar with its details. No sane man would think of entering a business unless he had taken time to post himself upon the points of that business. Every book, paper and scrap pertaining to that line would be carefully scrutinized for information. Every opportunity would be grasped by the beginner to glean facts pertaining to that chosen business.

The same holds true in the poultry business. The breed to be kept should be carefully studied and one chosen to suit the purpose for which it is intended. If eggs are wanted a variety should be selected whose reputation for filling the egg basket is well known. If eggs and meat are desired a breed that will produce both these requirements should be chosen. A visit to various poultry plants where different varieties can be studied and questions asked concerning their desirability is a good way to make a wise selection. Poultry magazines contain accounts about various breeds and should be carefully read in order that the variety selected will be the one best suited to one's requirements.

Then, when you have chosen the variety, keep on studying it. Get in touch with the breeders of this same variety and learn what they are doing. Watch the show reports and find out who are the leading breeders of this variety. Purchase stock of the best breeders regardless of price if you would advance your flock. Study the photographs and drawings of your breed appearing in the poultry press, so as to become familiar with the ideal type so much sought after. Follow high ideals and breed from the best birds each year. Keep pedigree records and know from year to year what you are doing, whether you are progressing or going back.

Injudicious breeding ruins many a flock. An intelligent system of line breeding should be followed and the results carefully noted from year to year. When fresh blood is desired purchase stock or eggs from breeders whose reputation is above reproach and the quality of whose stock is of the very best.

Too much care cannot be exercised in the selection of the breeders. Trap nests are the best known devices for determining which the best layers are among the flock. This is the only sure way of improving the egg yield. By eliminating the poor layers and those poor in standard requirements strive to build up a strain that not only will lay well but will win blue ribbons in the show room.

The feed and care are of great importance and the beginner cannot spend too much time in informing himself as to the best food and proper management. The poultry papers and books give much information along this line and one's common sense must teach him the rest.

The old saying, "Stick to your bush," is as applicable here as elsewhere. Stick to the breed that has been chosen. Nothing permanent can be accomplished by continually changing breeds. It takes years of careful study and pains to build up a strain of fowls. How far could one go if he shifted from one

breed to another every few years? All the accumulated knowledge concerning the first breed selected would be lost if a change was made. If mistakes are made and difficulties are encountered rectify the mistake and overcome the difficulties. There is glory in the triumph over difficulties. The beginner with a steadfast purpose and one breed before him should ever advance toward the goal which should never be reached. Thus is a strain made more perfect and success assured.

Hatching Chickens.

The laying season is here and hatching time will find many of us unprepared. Many of us are worrying about the kind of incubator to buy, and many others are selling their old incubators because of a machine they heard or read about that hatches more and better chicks without care or attention than their's did. Remember, there is no "best" incubator; no machine with all the good points and none of the weak points; none are perfect, most of them are good, some are better, and you can make no mistake in choosing one that is doing good work in your community. And do not discard the old machine that has done fairly good work, and is still in good condition, to buy one that "hatches every egg;" the chances are you will do no better with it. Within the past week one woman told me she was discouraged because of her poor luck the past season, as she only averaged one hundred and twenty-five chicks from two hundred eggs. Some of her hens failed to hatch a chicken, but that was no discouragement; think of averaging nearly ten chicks from fifteen eggs, says W. E. Vapion, of the Colorado Agricultural College.

Another woman declared it was no use to try again after hatching thirty-nine chicks from one hundred eggs. An incubator will not feed or regulate itself as the hen does, and we must not expect as good results until we have had some experience, and we should not blame the incubator because of poor eggs, a poor location causing uneven temperature, or our own carelessness.

Give the old machine a thorough overhauling, or order the new one at once, so you will not be delayed at the last minute; and though it may seem like joking we should like to warn against hatching too many chicks. Most of us are not prepared for large hatches, usually providing only one brooder for each incubator, and our chicks are overcrowded; in consequence most of them die and we pass along the saying: "Incubator chicks are never strong." Do not hatch too early or too late in the season and do not hatch more chicks than you can care for; and don't let the bugaboo, altitude, worry you; you may need to air the eggs a little longer or apply more moisture than the rules direct; otherwise run your incubators as you would at a lower altitude.

Cream Supply.

A farmer is likely to feel that when the milk is from the same herd, fed and milked in the same manner and the cream separated in the same way, that the per cent. of fat in the cream should not vary. The fact is, says Herbert A. Hopper, in Bulletin 209 of the experiment station, Berkeley, California, a uniform test of farm separated cream is more indicative of dishonest testing than are variations of a few points between different deliveries. The average cream patron is likely to look upon a sudden variation as incorrect. It is true that great care is needed to test cream accurately, even after the samples are properly taken, but variations are bound to occur that are entirely due to conditions under which the milk is separated. These conditions are such as affect the efficiency of skimming or the thickness of the cream.

Causes of Variation in Cream Tests.

These may be listed as follows:

1. Smooth running.
2. Speed.
3. Cleaning the separator.
4. Rate of inflow.
5. Temperature of milk.

Here's The Hatcher That Is Constructed On The Right Mechanical Principle

Other incubators may be as well made as the X-Ray but they don't hatch like the X-Ray because they're not made on the same principle. Here's an example. All other incubators burn the lamp high all the time—and let the excess heat escape when the egg-chamber gets too hot. We control the heat by cutting the flame down at the burner. That saves your oil. That's why

One Gallon of Oil

is enough for a hatch with the X-Ray. We place the lamp underneath, in the center. That's why we get absolutely uniform heat throughout the egg-chamber. And our lamp holds 4 to 8 quarts of oil. Fill it once and you never need touch it till the chicks are hatched out.

X-RAY INCUBATOR COMPANY, Wayne, Nebraska.



But those are not all the X-Ray advantages—although you will admit of their importance. Not alone do you save two-thirds of your oil and

Fill the Lamp Once

—but the X-Ray is also the easiest incubator to ventilate and turn the eggs in. The door is on top and has glass panels. Simply raise the lid. You can always see the thermometer without opening any door. Get all the facts. X-Ray incubators are made of all genuine California redwood. Legs galvanized steel, strongly braced. See how the X-Ray works—how it hatches. We'll send it out freight prepaid on liberal free trial. Now send your name and ask for our interesting Free Book No. 39. Also tells about the X-Ray Brooders—just as superior as X-Ray incubators.



Big News For Incubator Buyers

The famous Belle City Incubator wins the "Tyco's" Cup Contest over machines costing 2 to 5 times more—making it the Double World's Champion. And the winner raised over 97 per cent of the chicks. ORDER NOW! Get in the champion class quick for big results.

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—like hundreds of others. This is best hatching season. I guarantee satisfaction. You take no risk. Read remarkable offer below, then order or send for "HATCHING FACTS" FREE. J. V. ROHAN, President Belle City Incubator Co.

\$7.55 Buys the Best 140-Egg Incubator Ever Made
\$4.85 Buys the Best Brooder

Both Incubator and Brooder, Ordered Together, Cost But \$11.50—Freight Prepaid (East of Rockies)

Our Belle City Incubator will hatch more chicks, under the same conditions, than any other incubator, else your money will be refunded. This I guarantee. It has double walls and dead-air space all over, copper tank and boiler, hot water heat. The best self-regulator, deep nursery, strong egg tray, high legs, double door. "Tyco's" thermometer, egg tester and safety lamp included.



140-Chick Brooder

The Belle City Brooder is the only brooder having double walls and dead-air space. I guarantee it to raise more chicks than any other brooder made. Hot-water, top heat, wire yard, platform and safety lamp.

A complete Hatching Outfit for only \$11.50. No machines at any price are better—75,000 in use. Satisfaction Guaranteed. Write for book, "Hatching Facts" today, or send the price now and save waiting.

J. V. ROHAN, Pres. Belle City Incubator Co., Box 103, Racine, Wis.



We Ship Quick From St. Paul, Buffalo, Kansas City or Racine

Why Take a Chance With Your Eggs or Chicks?



Don't blame your poor hatches to the parent stock, or the eggs' because lack of moisture, irregular heat, and cheap incubators are responsible for the death of millions of chicks in the shell every year.

The International Self-Humidifying Incubator

Is absolutely automatic in every function, unvariable temperature, positive moisture from the moment of starting the hatch until necessary to properly dry the newly hatched unit of future profit, so thoroughly safe-guarding its entrance into poultrydom as to guarantee its livability.

Your brooder losses are not always the fault of the chicks. Ultimate success depends on the proper mothering of chicks.

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is the only one positively supplying the highest temperature at the outer edge. Therefore, no loss by crowding to the center and every chick has a chance under this hover. Entire metal construction. Portable and adjustable to all conditions. Eliminates expensive brooder house equipment.

Our best efforts are centered in the production of Day-Old-Chicks and Hatching Eggs from matured stock. No pullet eggs are used except for table purposes. All orders for Incubators, Hovers, Day-Old-Chicks or Hatching Eggs will positively be filled within 24 hours after receipt.

Send to-day for 1911 catalogue on incubators and hovers, also our stock catalogue on Rancocas Strain Baby Chicks and Hatching Eggs.

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Home Office, Box 303, Brown's Mills, N. J.
Branch, No. 21 Barclay St., New York City



6. Condition of milk.
7. Richness of cream.
8. Richness of milk separated.
9. Amount of water or skim milk used in flushing the bowl.

Where cream is intended for market purposes, it should be cooled and promptly bottled. Otherwise, the cream should be placed in clean cans and immediately cooled. Emphasis must be placed upon the word clean. Even when cans are properly washed at the creamery and not allowed to air, when opened at the farm they may give off a foul smell. It is safe to always give them another washing and time to thoroughly air before filling. Attention is called to the usefulness of a water cooler.

It is said that 99 per cent. of the cream delivered is so handled that the butter made therefrom is injured. The producer should have some interest in the delivery of his product, especially if he has given it good care and is sending it to a co-operative or other creamery where quality is recognized. It is desirable that the time from the cow to the churn be as short and conditions as favorable as possible.

The love of money that is the root of all evil is really the love of other people's.

BERRY BOXES

Crates and baskets, Cherry, Plum and Apple boxes, Climax baskets big and small.

AS YOU LIKE THEM.

We have the best equipped mill in the Northwest and manufacture the Ewald patent folding berry boxes, the only folding berry box made of wood veneer that gives satisfaction. Liberal discount on early orders. A postal brings our price list.

FRUIT PACKAGE CO., CUMBERLAND, WIS.

THE BERLIN QUART



OUR SPECIALTY

A white package which insures highest prices for your fruit. Write for 1911 Catalog showing our complete line, and secure your Baskets and Crates at winter discounts.

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Cards, circulars, booklets, newspapers. Press, \$5.00. Larger, \$10. Rotary, \$20. Save money. Print for others, big profit. All easy rules sent. Write factory for press catalog, TYPE, cards, paper. THE PRESS CO., Meriden, Connecticut.



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With the Luther Farm Special Grinder there is no need of cooling with water, or no danger of drawing temper from steel, because the wheels are

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the most wonderful sharpening substance the world has ever known. But beware of imitations with high sounding names. Get the Luther Grinder with the genuine, ten year guarantee, Carborundum wheels.

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12 MACHINES IN ONE

The New Hardy Red Raspberry SYRACUSE

The Greatest of all Hardy Raspberries.

Valuable for Home Use or for Market.

Though we have been growing this remarkable new variety for nearly ten years, we have not said so much as we should about its marvelous characteristics, since we have desired to give it a thorough test after a series of years.

It has been fruiting at my Rochester place, also at Green's fruit farm, and also at another of our nursery farms six miles out of this city. The soil in these three places differs radically, but on all of them the Syracuse Raspberry has proved to be one of the most notable ever known.

REMARKABLE FEATURES OF SYRACUSE HARDY RED RASPBERRY.

Most red raspberries propagate too freely from the roots, which increase so rapidly they choke the parent plant, causing reduced yield of fruit, and cause the abandonment of the plantation after a year or two of fruiting. Syracuse Raspberry has not this defect. It does not send up numerous young sucker plants from the roots, thus the plantation can be kept in a productive state for many years on the same ground without replanting. This is one reason why plants of Syracuse Raspberry cannot be sold so cheaply as many other varieties that make 100 sucker plants where Syracuse makes only one.

A VIGOROUS GROWER. I know of no red raspberry of its class which is so vigorous in growth as the Syracuse, canes of which often stand six feet high and are nearly as large as thumb. You cannot get an abundant crop of berries unless you have a vigorous growing plant and this you have in the Syracuse.

IT IS HARDY. You should not expect to make money from your berry crop or get a good supply of berries for your home table if you are growing a half hardy variety the canes of which are killed back every winter. Hardiness is an essential qualification for a successful red raspberry. We have never given Syracuse any protection here at Rochester, N. Y., and it has never been injured in the least by the most severe winters.

IT IS A LARGE BERRY. There are many reasons why we want a large berry. Large berries are more easily picked and sell for much higher prices than small berries. Syracuse is of the largest size. I have seen no red raspberry of this class so uniformly large as the Syracuse.

IT IS PRODUCTIVE. Syracuse Raspberry exceeds all others of its class in productiveness. A single row less than 100 feet long through my garden supplies more berries than my family can eat, and we almost live

upon these berries during their season. An acre planted to Syracuse Raspberries would yield an enormous amount of fruit, and what is more tempting in the market than a bright red raspberry of large size such as Syracuse.

IT IS BRIGHT RED IN COLOR. If I were to paint an ideal red raspberry I could not paint it in more tempting colors than I find in the Syracuse. Color is an important feature of every fruit but particularly for the raspberry.

IT IS OF HIGH QUALITY. After all is said quality must remain the most important factor of any fruit. If the fruit is not of good quality the more largely grown the worse it is for the fruit grower, for fruits of insipid flavor discourage people in buying or eating fruits, and therefore prevent sales that otherwise would have been made. The flavor of Syracuse is sprightly and aromatic. The berry is juicy, almost melting in the mouth. It is not a sour, nor is it a sweet berry, and yet it has acidity enough to give it character.

IT IS A FIRM BERRY. Strictly speaking there is no red raspberry that is absolutely firm. Red raspberries should always be picked and sold in pint baskets. As red raspberries go Syracuse is firm, standing up as well or better than Cuthbert or other standard old varieties.

HISTORY OF SYRACUSE RASPBERRY. About ten years ago an invalid at Syracuse, N. Y., a subscriber to Green's Fruit Grower, wrote me that he had a new red raspberry that had grown up in his garden from seed. He told me of its marvelous characteristics and asked that I come and see it, as he said he had consumption and did not expect to live long, therefore desired to sell the variety at once. We found the variety so promising we purchased it at once, digging up every plant in his garden and removing them to Green's Fruit farm where they have been fruiting and multiplying ever since. Each year we have become more impressed with the value of this remarkable variety.

COME AND SEE IT WHEN IN FRUIT. If you are passing through Rochester in July or August it will pay you to stop over a train and come to my home on South Avenue, corner Highland Avenue, and see Syracuse New Red Raspberry in fruit in my garden. It can be seen at either of Green's fruit farms 12 miles southwest of Rochester. There is nothing more convincing than to see for yourself. Seeing is believing. For free catalogue address Green's Nursery Co., Rochester, N. Y.



Letters From the People.

"Prudent questioning is the half of knowledge."—Proverb.

Do Young Orchards Need Spraying?—Chas. A. Green: Would it be advisable for me to spray my one year old orchard this spring? It consists of apple, cherry, pear, peach, plum, apricot, and quince, about three hundred in all. If it is best to begin spraying this spring, will you tell me what spray to use and at what time to spray? The trees made an excellent growth last summer and looked healthy in the fall. There is no orchard within a mile of mine. They were planted on new land. I like your magazine immensely.—Jos. Guerin, Wash.

C. A. Green's reply: Possibly your orchard planted last year may not require any spraying, if there is free growth, and the foliage is healthy and there is no attack of insects or fungus diseases. Many orchards are not sprayed until they come into bearing. It requires some experience to know whether the various kinds of trees in an orchard may be sprayed. If there are no insects and no diseases, I would prefer that the trees should not be sprayed, though somebody would offer to spray them without charging any-

quite expensive and would be something of an engineering feat. On an orchard thus located, where the power sprayer on a wagon could not be used, I am inclined to think that some form of man power would be more economical, but I have had no experience in such a situation. There are few orchards in the country planted on such steep hillsides as to make it impossible to spray with the power sprayer drawn by horses on a wagon. Possibly some of our subscribers have had experience in spraying orchards on steep hillsides. If they have had this experience they can write Green's Fruit Grower, telling how they did the work, for publication.

From Alabama.—Green's Fruit Grower: I notice in a recent issue of your journal, that you desire scenes from the south. I will send you a post-card or two, one showing an old "negro cabin," possibly one or two others which I may find suitable for reproducing. I also send you one of my advertising cards, which show something of the new type of houses that are being acquired by the better class of negroes in this part of the state of Alabama. I was a fruit grower near Medina, your adjoining county, until my health became impaired, which was in 1890, and I was recommended by my physicians to go south, which climate would be better suited to my requirements, and I am building cottages for colored people here in the outskirts of Birmingham. I still enjoy the helps and writings which come to us regularly in Green's



"A NEGRO CABIN IN ALABAMA."

thing for the work, for there is always a possibility of the spray injuring the foliage more or less and yet this seldom occurs. A young orchard such as yours is far less likely to need spraying than an older orchard. Keep close watch of the leaves of the trees. If there are brown or yellow spots on the leaves or if the leaves do not look healthy and bright, here is an indication that possibly spraying is needed.

A Steep Hillside Orchard.

Editor Green's Fruit Grower: I noticed an article on page 17 of the February issue of your paper that interests me greatly. The title is "From Thicket to Orchard." The method of spraying described therein has set me to thinking of the use of such a system in our orchard. The natural topography is suited to the gravity system, the highest part of the orchard being some three or four hundred feet higher than the lowest. We have some seventy-five acres in trees. Do you think such a system would be practical? How about piping that would stand the chemical action of the spray mixtures? And how about keeping the chemicals in solution and well mixed? Then, too, would there be much danger of the systems becoming clogged with the sediment? Have you ever seen or known of such a system in successful operation? And do you think such a system would afford a practicable method of spraying our seventy-five acre orchard of which the biggest part is on rather steep hillsides that preclude the use of a power sprayer (unless we terrace)? How far apart should the spigots in the orchard be or what is the longest line of hose that could be successfully used? Please give me any information you may be able to gather in regard to the feasibility of such a system, and give me your candid opinion of its merits for an orchard such as ours.—Bolling Hall, N. C.

C. A. Green's reply: You ask whether a system of iron pipes leading from a supply of water at the highest part of the steep hill side orchard could be arranged so as to carry the poison spray to points where it could be applied through a rubber hose to the tree tops. Yes, it is possible that such a system might be a success, but it would be

Fruit Grower. Peach, plum and pear trees have been in bloom for nearly three weeks here. Several frosts and temperature below the freezing point last week, have made prospects for fruit rather hazardous, this season. We have had scarcely any winter this season. February has been much like April and May weather most of the month. Some have planted garden, and we look for spring in earnest about the middle of March. I do not wish to lose any of the good reading that the Fruit Grower contains.—H. W. Blakely, Alabama.

Strawberries.—Prof. H. E. Van Deman: I have read several articles in the Green's Fruit Grower lately among which were some answers to the questions put by various fruit growers. I am especially interested in strawberries and wish to start a small field of them. I would like to have you give me some information as to the different kinds to plant. The soil is a heavy loam. What are the necessary elements of plant food essential for strawberries, which I would have to add to the soil?—Helen Clemens, Wis.

C. A. Green's reply: There are over a thousand known varieties of strawberries, but many of them are not valuable as market varieties. While I used to grow many varieties, I have of late confined myself to Corsican, Senator Dunlap, Brandywine, and three or four others. The three varieties named seem to embrace the best character of a strawberry for a clayey loam. Strawberry plantations make use of much the same fertilizers as corn, wheat, and other farm crops, such as phosphoric acid, potash and nitrogen. Nitrogen promotes vigorous plant growth, but if used to freely it is liable to make the fruit softer. It should be applied only during the growing season and should not touch the foliage.

What Can an Inexperienced Man Do?—Green's Fruit Grower: I am a builder in the city of Nashville. Am looking to the selection of a farm home, perhaps in northwest Georgia or northeast Alabama. I have read "How I Made the Old Farm Pay." You will note my needs from the queries that arise. Can I know what to get till experience or study makes me a judge?

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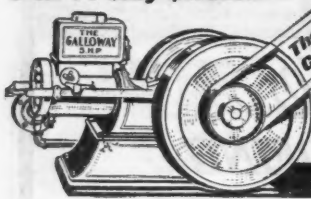
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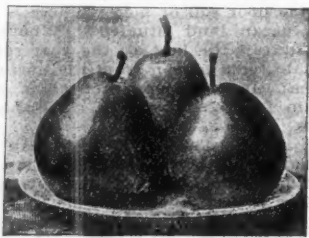
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Currants Profitable—Editor Green's Fruit Grower: In 1909 we set out in our garden ten Fay's prolific currant bushes, two year old plants. In 1910, the very next summer, we gathered ten quarts of currants from those bushes, valued at 12 cents per quart, which more than paid for the stock set out. The coming spring we intend to plant more bushes because it's such a pleasure to get quick returns. The fruit was first class.—Harriet A. Acly, N. Y.

Pruning the Grape—Chas. A. Green: Please give me some information on the pruning of grape vines. First, how many buds should be left of last year's growth? Second, what is the best time for pruning grape vines? Some neighbors advised me not to prune till the end of March.—New Jersey Reader.

C. A. Green's reply: Pruners usually leave three buds at the top of each cane that is removed from the grape vine, but two buds, or even one bud, left on each spur might be enough in many instances. If I had my choice of time for pruning grape vines, trees and raspberries I would wait until the severe freezing of winter has passed, and wait until April. But where there are large orchards and vineyards the work is usually done in mild days through the winter and no injuries result.



Moon Planting—Charles A. Green: I think Green's Fruit Grower a grand paper, filled with valuable information. I have a lot of pear trees to set out. When will be a good time to set them out? Will it injure pear trees to cultivate the ground? I have heard it would kill them to plow near them. Would like your advice. I wish to cultivate the lot I am going to set out. I have heard a great deal about certain times of the moon to set fruit trees. Do you think setting trees in the old or new moon has anything to do with their bearing fruit?—Miss Belle Prichard, Ky.

C. A. Green's reply: Set out the pear trees in April or as soon as the severe weather has passed, or as soon as the ground is soft enough. Keep the ground cultivated in your pear orchard. Pay no attention to the moon in planting trees, or doing other work.

Cost of Spraying—C. A. Green: I purchased a power sprayer last spring and sprayed my apple orchard. The result was that we had the finest fruit in the neighborhood. Now several of my neighbors want me to spray for them, but as I have never done any of that kind of work except for myself, I hardly know what to charge. Will you kindly advise me? They furnish the spray material. I sprayed my orchard last winter with scalecide for the scale, and then I used pyrox for the codling moth. I sprayed twice with pyrox, but I think it cost too much. Do you know of anything to use for the codling moth that would be cheaper?—William S. Weart, N. J.

C. A. Green's reply: For yourself and another skilled man and the use of your machine I do not think that \$10.00 per day would be an excessive price to be paid for spraying your neighbor's

orchard. If you have a good power sprayer you could go over quite a large orchard in one day. Much would depend on the price of labor in your locality which might be cheaper or dearer than at Rochester, N. Y. Some allowance should be made for the wear and tear of machinery and your skilled labor, also that of your assistant. See pages eight and nine in February issue of Green's Fruit Grower for full information on spraying for codling moth, etc. Bordeaux mixture and poison, that is arsenate of lead which is preferred over paris green, is the remedy for codling moth.

Rose Bugs.

Green's Fruit Grower: I see someone is asking about rose bugs. I was very much troubled with different kinds. Little hoppers came first, dropping to the ground at anyone's approach, then came the tiniest caterpillars I ever saw. My roses were a sad sight before I took notice of these later pests. I used sulphur, tobacco, soap and with the sprinkling can applied a strong solution liberally. It was fine. I took pains to reach the underside of the leaves, one holding the bushes over while another sprinkled them. The caterpillars gave no more trouble. It got the little hoppers too, for we saturated the grass under the roses, but these came back again but not in such numbers as before. We kept them down, however, by spraying often. I believe we killed all on the bushes but these little hoppers are on everything. This soap is equally good for other pests. Some of our apple trees got oyster shell scale and I made a soft soap of this sulphur tobacco soap and painted the trees with this, putting it on with a paint brush from the ground to every little tip. It took two hours to do one tree but the scale was dead and the tree is all right now.—Mrs. G. P. West, Pa.

Mr. Green: I am interested in small fruit and peaches. Why don't you publish an item on how and when to cut off cherry grafts? At what time and when to bud peaches? Now I would like to read on those items as I want to graft some cherry. How shall I trim cherry? I have stumbled on this job and I find that the cherry has to be trimmed also and the peach as well as an apple tree.—A. Conner, Pa.

C. A. Green's reply: Thanks for subscription received. Scions of the cherry or any other fruit trees intended to be used for grafting the coming spring should be cut from the tree before the buds expand or begin in the least to open. Nurserymen sometimes cut scions for grafting in midwinter or later, storing them in cold cellars or icehouses, where the scions will be kept damp and cold. No scion can be used for grafting except the growth of the tree which was made last season, that is the newest growth. I trim my cherry trees little as possible, merely thinning out the superfluous branches. The cherry and plum will not endure severe pruning as will the pear and apple. In planting cherry trees the branches should be cut back, leaving stubs four to six inches long.

Green's Fruit Grower: (1) Which is the most profitable to grow in northern Michigan, the strawberry or gooseberry? (2) Which is the easiest to raise? (3) Which is the best seller? (4) Please give information about the gooseberry. Sincerely yours—A. Constant Reader.

C. A. Green's reply: I consider the strawberry more profitable generally than the gooseberry and yet there are localities where gooseberries are in great demand and would pay as well or better than strawberries.

No. 2. Strawberries and gooseberries are easily produced. The gooseberries will require far less hoeing and weeding than strawberries. Strawberries will give largest yields in most instances.

No. 3. There are few fruits that will sell as quickly at sight as the strawberry. Generally speaking the strawberry is a better seller than the gooseberry. There are few people who can resist buying beautiful fragrant strawberries, coming in the season when fruits of all kinds are so rare.

No. 4. A book could be written about gooseberries and their culture, which is almost as simple as that of the currant and similar to the currant. It will thrive best in partial shade. The English varieties must be sprayed with Bordeaux mixture early in the spring as soon as the foliage becomes established as they are liable to be attacked with fungus. Give good clean culture. Plant in rows three to four feet apart each way. Downing is the most popular variety and the one most free from mildew.

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SITUATIONS WANTED

MEN TO WORK IN COUNTRY—According to Manager J. T. Hunt, of the Free Labor Bureau of the Bowery Mission, 227 Bowery, New York city, an unusual number of men have been supplied recently for work on farms and other places in the country. But hosts of worthy men in the city are still unemployed and the Bureau, which makes no charges whatever, is prepared to furnish able workers at any time that application is made to the address above.

MISCELLANEOUS

MONEY GIVEN for old books, magazines and engravings. Doremore, Ashland, Mass.

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DAHLIA BULBS—Twenty named varieties for \$1.00, no two alike. Catalogue. Howard Thayer, Amherst, Mass.

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Farmers are conservative and reluctant to experiment with novelties until they have thoroughly investigated them. Some farmers are still sticking to the old-fashioned smooth-coated roofings which require regular painting simply because they don't know very much about the new mineral-surfaced type. Probably they do not realize how easy it is to find out all about the new kind of roofing that needs no painting. All that is necessary to do is to write to the manufacturers of Amatite Roofing, asking for a free sample. It will be sent by return mail and involves no obligation whatever on the part of the inquirer. Address the nearest office of the Barrett Manufacturing Company, New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Pittsburg, Cincinnati, Kansas City, Minneapolis, New Orleans, Seattle.

MARKET GARDENERS' PAPER—Weekly Market Growers Journal—only paper printed especially for vegetable growers. \$1.00 a year, 5¢ issue. For 10 cents and names of three market gardeners we will send it ten weeks with our popular booklet, "50,000 a Year From Twelve Acres." Send for free sample copies—it is the best way to judge. Market Growers Journal, 544 Walker Bldg., Louisville, Ky.

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Green's Fruit Grower: I enclose photograph of a small patch of Corsican strawberries which I would like to have reproduced in the Fruit Grower. It was taken September 15, 1910. I bought three plants from you (for 25c) before they had a name. The income from the above patch for last season was at the rate of \$728.00 per acre. I have them planted on hills eighteen by thirty inches.—Sam B. Himes, Pa.

Wild Deer Eating Foliage.—In reply to William E. Mills, of Vermont, I will say that I do not think that it is possible to apply anything to the foliage of trees to prevent the wild deer from eating it.—C. A. Green.

Green's Fruit Grower: Would you please advise me about spraying my cherry trees? I have a young cherry orchard that bears well, but when the cherries are ripe they are gnarly and have a large white maggot near the stone. Would you please tell me what to spray with and when?—C. W. S.

Reply: Cherries may be sprayed now at any time with lime-sulphur, one gallon to fifty gallons of water, and a second spraying just as they are out of bloom (bloom falling), so as not to affect the bees, using two pounds arsenate of lead to fifty gallons of water. This may be repeated two weeks later.—J. W. Ball.

Remedy for Plum Rot.—Please tell me what varieties of plums have proved the best for market, most free from rot and black knot at Green's fruit farms? Also which in western New York do the best? Do extensive plum growers keep their plum orchards cultivated, or mulched, or in grass cutting and leaving the grass for a mulch?—Chas. L. Todd, N. Y.

C. A. Green's reply: Shropshire Damson, Bradshaw, York State, Thanksgiving and Burbank are all desirable and not much inclined to rot. Rotting of plums can be prevented by spraying the leaves with bordeaux mixture. Spray soon after the fruit first sets and later on when the plums are about half grown.

C. A. Green: There is a small square of land near the house where I had planned to have my cherry trees set, but they tell me it is made land, and is all rocks underneath. There is a stone wall runs around it where I plan to set the grape vines to cover it up, and make it a thing of profit and beauty instead of the unsightly thing it is now. What do you advise?—Mrs. J. E. Dow, Maine.

C. A. Green's reply: If the soil is two feet deep you can grow cherry trees though there may be rocks below. If the soil is poor get a wheelbarrow of soil from the garden and place it over the roots of the cherry trees when you plant them and I think your trees will succeed and your grape vines also.

C. A. Green: I have a strawberry bed of the Brandywine, and certainly they are a very superior berry. I am directed to cover the berries with straw or something similar in the fall and to let the berries grow up through this straw in the spring, that is pushing it away from the plant a little. Now if one does this, how can he cultivate and fertilize the plants? The object as explained was to have the berries rest on the straw and thus be less likely to rot. Also, if the straw is to be left around the plants, how is one to pot the young runners, potted in the late summer?—E. C. Brownell, N. J.

C. A. Green's reply: I have tried leaving the straw on the beds as you propose but it did not work. The straw must constantly be removed to clear the weeds, but a little straw left on the beds will do no harm, but straw of all kinds brings weeds and weed seeds. Therefore, I would remove most of the straw covering after the severe freezing weather has passed. Do not hoe or cultivate deeply between the rows and the plant.

Mr. Editor: You want your readers to let you know if they know anything about the benefits of lime on the trunks

of trees. Well, you can hardly find two people to agree on the same subject, but I did find one neighbor who had been doing as I had done and the results were the same. After using the lime on the trees the bark became smooth and clean, scale and every other insect disappeared, but it is impossible to get it on all the branches so that it is only a partial cure. The way I do it, get a quart of stone lime, pour boiling water over it, as it boils keep putting on the hot water so that it will not be thick after it stops boiling, keep it covered while boiling, put it on the tree pretty hot. I use a whitewash brush for the trunk and large limbs, a paint brush on the small limbs, two or three times a year.—Wm. H. Tabb, N. Y.

Dehorning Old Trees.

Editor Green's Fruit Grower: Relative to pruning an old orchard (twenty years), all heavily seeded down to red clover for some years, is very productive, but rather tends to small fruit, especially apples, is too thickly set, and branches are somewhat inter-locking. Would you advise cutting back of tops and cutting off protruding limbs? Wish to do it at once. Weather is not cold. Would you advise disking the cover crop and let it lie as mulch? By cutting back will it tend to create "water" sprouts. I speak generally of apples.—O. G. Rogers, Idaho.

C. A. Green's reply: Old apple trees can be renewed in vigor by dehorning. This means, by cutting off all the branches of the tree at a distance of four to six feet from the point where they branch out from the trunk. I would advise leaving one branch undisturbed for two years, at which time this remaining branch may be cut back. This dehorning will give you a new top which will be liable to be too dense unless you thin out some of the branches when they are small. If the old trees are infested with any kind of scale or other insects, by the dehorning process you have a far better opportunity to control the insects and destroy them as you will not have one-quarter of the surface to go over with your insecticide, as where you allowed the entire top to remain. If the trees are low branched it may not be necessary to cut back the branches so severely as I have indicated. See that the soil is kept cultivated from early spring until August, that the soil is kept in a fertile condition and that they are sprayed regularly two or three times a year; once just before blossoms appear; again soon after the blossoms fade and fall; then later in the season if spraying is deemed necessary. Read page one, March issue.

Dwarf Apple Trees.—Mr. C. A. Green: I am setting out an apple orchard for commercial purposes on my farm in New York state and I have been considering the advisability of putting in dwarf apple trees as fillers, to be taken out when the other trees have become large enough to crowd them. I am going to raise Baldwins almost exclu-

Let Galloway Save You \$25.00 to \$40.00 on a Manure Spreader



If you'll send a postal for my Special 1911 Spreader Offer, I believe we can make a deal. If we do, you'll save at least \$25.00, perhaps \$40.00, according to size and style you want. And you get a free trial and a guarantee that would break me if my Spreader wasn't right. I know I have to go high on quality and low on price, because I sell by mail. The other fellow is right on the ground to persuade you personally. My quality and price has to do all my persuading. Let me try it. Our capacity is 42,000 spreaders this year in order to quote the low prices I do—30 to 365 days free trial and my long time binding guarantee in writing.

\$25.00 to \$40.00 saved—think of it! That's fair, isn't it? If you can think of a fairer proposition than I'll make you, I'll print it in my next advertisement. Get your pencil or pen right now, and send me a postal for my big Spreader Book, showing 5 styles and sizes, from \$39.50 up. I'll send the book free and a proposition that will make you do some tall thinking whether you buy from me or not. Address: Wm. Galloway, Prop., THE WM. GALLOWAY CO., 865 Galloway St., Waterloo, Iowa.



Send Postal For Book

GALVANIZED FENCE WIRE

\$1.60 FOR 100 LBS. AND UP

This is our price for our No. 9 gauge Galvanized Wire Shorta. The terms Wire Shorta is to denote mill ends of regular fence wire. In the manufacture of wire the mills have lengths over that do not run continuously to a coil. We buy these under contract and put them up 100 pounds to the coil. As far as quality is concerned the wire is as good as any regular full length coil of wire. It is smooth plain galvanized. The lengths range anywhere from 25 to 150 feet, but we do not guarantee the length. As near as possible we keep one or two gauges only to a coil. No farm is complete without one or two coils of these handy wire shorta. Extensively used by grape growers and for fence purposes. Sold as is, no come backs. Prices per 100 pounds as follows: No. 9.....\$1.60. No. 10.....\$1.65. No. 11.....\$1.70. No. 12.....\$1.75. No. 13.....\$1.80. No. 14.....\$1.85. No. 15.....\$1.90. No. 16.....\$1.95. No. 17.....\$2.00. No. 18.....\$2.05. No. 19.....\$2.10. No. 20.....\$2.15. No. 21.....\$2.20. No. 22.....\$2.25. No. 23.....\$2.30. No. 24.....\$2.35. No. 25.....\$2.40. No. 26.....\$2.45. No. 27.....\$2.50. No. 28.....\$2.55. No. 29.....\$2.60. No. 30.....\$2.65. No. 31.....\$2.70. No. 32.....\$2.75. No. 33.....\$2.80. No. 34.....\$2.85. No. 35.....\$2.90. No. 36.....\$2.95. No. 37.....\$3.00. No. 38.....\$3.05. No. 39.....\$3.10. No. 40.....\$3.15. No. 41.....\$3.20. No. 42.....\$3.25. No. 43.....\$3.30. No. 44.....\$3.35. No. 45.....\$3.40. No. 46.....\$3.45. No. 47.....\$3.50. No. 48.....\$3.55. No. 49.....\$3.60. No. 50.....\$3.65. No. 51.....\$3.70. No. 52.....\$3.75. No. 53.....\$3.80. No. 54.....\$3.85. No. 55.....\$3.90. No. 56.....\$3.95. No. 57.....\$4.00. No. 58.....\$4.05. No. 59.....\$4.10. No. 60.....\$4.15. No. 61.....\$4.20. No. 62.....\$4.25. No. 63.....\$4.30. No. 64.....\$4.35. No. 65.....\$4.40. No. 66.....\$4.45. No. 67.....\$4.50. No. 68.....\$4.55. No. 69.....\$4.60. No. 70.....\$4.65. No. 71.....\$4.70. No. 72.....\$4.75. No. 73.....\$4.80. 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Sugar Making.

Down yonder vale, where maples sway,
And winds of springtime softly stray,
There comes the sound of merrymaking,
Of youths and maidens joined in play.

There swing huge kettles in a line,
Round which the blades leap and twine,
And bubbles bright and evanescent
Gleam on the storehouse's outshine.

The maple-trees their sweetness drop
In tinkling rhymes that never stop;
And peering, edging round the buckets,
In thoughtful mood, sapsuckers hop.

A grape-vine swing! and pleasure wakes,
Renewed, refreshed. Each maiden takes
Her turn; at last, what wreck and ruin!
What peals of laughter when it breaks!

No sorrow haunts the woodland air;
A smile each face is seen to wear;
It seems the golden vapors double
The joys of life and hide all care.

The hours grow late, and clearer ring
The tuneful measures that they sing;
For "stirring-off" the passing minutes
Still close and closer to them bring.

The round, red moon begins to climb
The eastern sky, and brings the time
Of their departure and the finish
Of this, my sugar-making rhyme!
—Alonso Rice, in "The Farm World."

—It is exactly in the treatment of
trides that a man shows what he is—
Schopenhauer.

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Sweating! A few dollars gets this
grand little work engine, complete and
ready to run Cream Separators, Corn Shred-
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Gives a lifetime of steady serv-
ice! All Sizes: 3 to 20 h. p. No
cranking! No clogs! No gears!
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construction. Thousands
in use. Guaranteed 5 years.
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Watch Case Opener, Pipe Cleaner, Cigar Clip-
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tion if you send one-fourth of the amount of your order
in cash.

WRITE FOR FREE SAMPLES, ALSO ASK FOR OUR ROOFING CATALOG No. N. K. 69
A valuable book filled with information regarding all kinds of Steel Corrugated and Ready Roofing. Ex-
plains how easily this material can be applied to the roof, also describes our complete stock of fancy metal
ceilings—quotes our low prices on Sidings—Eave Troughs—Down Spouts—Etc., Etc. Write us to-day.
CHICAGO HOUSE WRECKING CO., 35th and Iron Sts., Chicago.

GREEN'S FRUIT GROWER

AN ILLUSTRATED MONTHLY JOURNAL.

GREEN'S FRUIT GROWER CO., Publishers.

C. A. GREEN, Pres. and Treas. R. E. BURLING, Vice-Pres. J. W. BALL, Sec'y.

Charles A. Green, Editor.

Prof. H. E. Van Deman, Associate Editor.

35 cents per year; Four years for \$1.00. Postage free.

Office, Corner South and Highland Avenues.

Rates for advertising space made known on application.

Entered at Rochester (N.Y.) Post Office as second class mail matter.

Subscribers who intend to change their residence will please notify
this office, giving old and new addresses.

OUR ADVERTISERS.—We believe that the advertisers using space in Green's Fruit Grower are a worthy and
deserving class of business men. It is not our intention to permit the insertion of any swindling advertisement in these
pages. If any subscriber has been defrauded by any advertisement appearing in Green's Fruit Grower he will do us and
the public at large a service by at once reporting this advertiser to us, giving full particulars. Upon receipt of this
complaint we will investigate the affair and will do everything in our power to bring about a satisfactory adjustment.
If we find that any advertiser has defrauded our readers, we will deny him space for his future ads. in these pages.

CURRENT COMMENT.

—Spring is here again.
—Nature slowly opens her eyes after
her long winter's sleep at the north and
we are all happy.

—The army maneuvers along the
border line of Mexico makes interesting
reading for the Japs.

—President Taft has called an extra
session of Congress to convene April 4,
to render a final decision in the recip-
rocity with Canada matter.

—Hobson we think was surprised as
well as everyone else when President
Taft as commander-in-chief of the
American army ordered our soldiers to
Texas.

—The parcels post bill was killed in the
Senate. Senator Bailey, of Texas, was
responsible for its not passing. But the
American people will get a parcel post
service in due time.

—The total value of farm land and
buildings in Idaho was given in 1910 as
\$244,420,000, as against \$42,318,000 in
1900, an increase of \$202,102,000, or 478
per cent.

—The total value of farm land and
buildings in Massachusetts was given in
1910 as \$191,298,000, as against \$158,019,-
000 in 1900, an increase of \$33,279,000, or
21 per cent.

—It costs the express companies only
\$28 a ton to transport express matter,
as compared with \$325 a ton it costs the
government to handle and transport the
mails. What do you call this for business
management?

—Through the Iowa Corn Growers'
Association, the International Harvester
Company of America has offered the
farmers of Iowa premiums to the amount
of \$4000. The largest amount of pre-
miums ever given for the best samples
of oats.

—Missouri is to claim the world's
championship for certain pipe produc-
tion. The annual report of Labor Com-
missioner Haller, just received, shows
that during the last year 25,455,594 "Mis-
souri meerschaums" were manufactured
in the state of Missouri. Seven factories
are operating in the state. The pipes
sell wholesale at about five-ninths of a
cent each.

—In the United States the referendum
has already been adopted by Maine, Mich-
igan, Missouri, Oklahoma, Arkansas,
South Dakota, Montana, Nevada and Ore-
gon. In Kansas, Nebraska, California,
North Dakota, Wisconsin, Colorado, Illi-
nois and Massachusetts the measure has
been promised in the platforms of both
the great political parties. In Wyom-
ing, Arizona, Iowa, Minnesota, Utah,
Washington, Idaho and Ohio it has been
promised in the platform of one of the
great parties. In Texas the measure
exists in a modified form.

—"Easter" comes from the "East."
When we trace the word etymologically
we find it has embodied the idea of a
universal celebration that dates from the
very beginning of human thought, for
we can trace no great thought behind
it. We get "Easter" from the Anglo-
Saxon goddess Eastre, whose festival
was in April, at the opening of the
spring, and who was worshipped by the
Teutonic people. The Germans call her
Ostara, and her worship under any name
has been and is an expression of the
universal outburst of rejoicing over the
awakening of nature after the long sleep
of winter.

—Have you tested your seed corn?
—Hides and skins also form a marked
increase. Fifty-one million dollars in
1900, to \$86,000,000 in 1910.

—Appropriations at the last session of
Congress aggregated \$1,025,489,662, ac-
cording to the statements issued recently.

—The total value of farm land and
buildings in Kansas was given in 1910 as
\$173,653,000, as against \$643,653,000 in
1900, an increase of \$1,090,000,000, or 169
per cent.

—The maple tree in the United States
furnishes a yearly crop of 60,000,000
pounds of sugar and 3,000,000 gallons of
syrup. It seems remarkable that this
country does not produce more of the
delicious sweets of the maple.

—Agricultural colleges report receiv-
ing many calls for trained men in the
horticultural world. Large fruit farms
owned by wealthy corporations and in-
dividuals are seeking out men who are
qualified to care for immense fruit farms
in the east and in the west.

—The statistics of Commerce and
Labor show that fruits and nuts import-
ed into this great agricultural country
have doubled since 1900. From \$19,-
000,000 in value in 1900 to \$39,000,000 in
1910. Fruit imports in 1900 amounted to
\$16,000,000 to \$26,000,000 in 1910.

—While the United States produces
much sugar we imported in 1900, \$92,-
000,000 worth, while in 1910, \$114,000,000
worth were imported. These figures be-
ing exclusive of the sugar brought from
Hawaii and Porto Rico, which amounted
in 1910 to nearly \$66,000,000 worth.

—Thirty years ago less than one-third
of the people of the United States lived
in cities, towns and villages. About one-
half the population of the Republic is
so herded to-day. With this herding there
has come, in the larger centres, a state
of destitution among the submerged
masses that is simply appalling.

—Colonel Roosevelt, March 18th, dedi-
cated the Roosevelt dam, seventy-five
miles from Phoenix. The great works
are nearing completion for the genera-
tion of a total of 27,000 hydro-electric
horse power. The Salt River valley
farmers have added another product to
their already very varied crops. From
oranges and dates to alfalfa and cantal-
oupes they have a long list of growing
things, nearly every semi-tropic fruit
and vegetable can be listed. It is some-
thing of a feature to produce such a
variety.

Everyone who has a number of fruit
trees and has realized the great success
of those who protect their orchards by
spraying against attacks of insects and
fungus diseases, has wished for a con-
venient, safe, efficient spray material
ready mixed, such as the popular ready-
mixed paints and varnishes are now
sold. This want is supplied by Pyrox, a
combined insecticide and fungicide in
paste form, all ready to apply by dilut-
ing with water. Much of the prize fruit
at recent shows was sprayed with it;
Dr. Jabez Fisher, of Fitchburg, the well
known horticulturist, says: "Entire re-
liance can be placed upon it, and I know
of nothing that is its superior as an all
around, clean, convenient and depend-
able preparation for such purposes." It
is put up in sizes ranging from 1 to
600 pounds by the Bowker Insecticide
Co., of Boston, who advertise in our
columns and will send their valuable
catalogue of information free on request.
Everyone growing fruit should read up
about Pyrox in time to spray early this
spring.

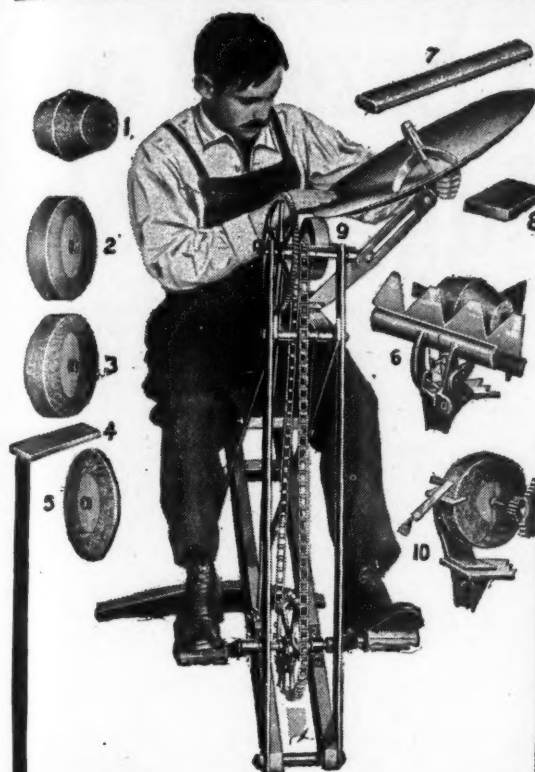
Patterns for Women Who Sew.

3852—Ladies' Coat, 7 sizes, 32 to 44 inches
bust measure. For 36 bust it requires
2½ yards 44 inches wide. Price 10
cents.
5369—Ladies' Shirt Waist, cut in 6 sizes,
32 to 42 inches bust measure. Size 36
requires 3¾ yards 27 inches wide. Price
10 cents.
1724—Ladies' French Open Drawers, 8
sizes, 20 to 34 inches waist measure.
For 24 waist it requires 1¾ yards 36
inches wide, with 3¾ yards edging 5
inches wide. Price 10 cents.
5136—Girls' Sailor Dress, cut in sizes 6,
8, 10 and 12 years. The 8 year size re-
quires 2½ yards of 44 inch material;
1¾ yards of 27 inch contrasting goods.
Price 10 cents.
4663—Boys' Russian Dress, 3 sizes, 1, 2
and 3 years. For 2 years it requires
2½ yards 27 inches wide. Price 10
cents.



4047—Ladies' Shirt Waist, 7 sizes, 32 to
44 inches bust measure. For 36 bust it
requires 3¾ yards 27 inches wide. Price
10 cents.
5086—Ladies' Shirt Waist, cut in 5 sizes,
32 to 40 inches bust measure. Size 36
requires 2½ yards of 36-inch goods.
Price 10 cents.
5338—Girls' Box Coat, cut in sizes 4, 6, 8,
10 and 12 years. Age 8 years requires
1¾ yard 44 inches wide. Price 10
cents.
4971—Children's One-Piece Dress, 5 sizes,
2 to 10 years. For 6 years it requires
1¾ yards 36 inches wide. Price 10
cents.
5351—Ladies' Three-Piece Skirt, cut in 6
sizes, 22 to 32 inches waist measure.
Size 24 measure 3 yards around lower
edge and requires 3¾ yards 44 inches
wide. Price 10 cents.
2650—Boys' Blouse, 10 sizes, 3 to 12 years.
For 8 years it requires 2¾ yards 27
inches wide. Price 10 cents.
4551—Children's Russian Dress, 4 sizes, 2
to 8 years. For 4 years it requires 2¾
yards 36 inches wide. Price 10 cents.
3205—Children's Drawers, 2 sizes, 1 and
2 years. For 2 years it requires ¾
yard 36 inches wide. Price 10 cents.
4688—Girls' Dress, With Gimpes, 4 sizes,
6 to 12 years. For 8 years it requires
4¾ yards 24 inches wide; 1 yard 36
inches wide, 1½ yard tucking 18 inches
wide for gimpes. Price 10 cents.
4675—Misses' and Small Women's Coat in
Full or Three-Quarter Length, 3 sizes,
14, 16 and 18 years. For 16 years it
requires 3¾ yards 54 inches wide for
full length or 3¾ yards 54 inches wide
for three-quarter length. Price 10
cents.
Patterns 10c. each. Order pattern by
number, and give size in inches. Address
Green's Fruit Grower Co., Rochester, N. Y.

Try This Harman Tool Grinder FREE



I will send you a **Harman Special Alectride Farm Tool Grinder**, with 10 Grinding Attachments right to your farm for an absolutely **free trial** lasting 10 days.

I will guarantee that this Grinder will **not** draw the temper from steel.

I don't want you to send me any money—not a cent. **I want to make you an offer so liberal that you simply cannot afford to refuse it.** I will give you the use of this magnificent outfit for **ten days absolutely FREE**—no red tape, no papers to sign, no obligations of any nature. Just get the outfit, use it for ten days just as though it were your own, on your own work, sharpen your sickles, plow shares, cultivator blades, scythes, axes—anything that is dull—then, if you wish, return it to me at my expense.

10 MACHINES IN 1

1. One Sickle Grinding Wheel (Improved)
2. One Fine Grinding Wheel (Improved)
3. One Coarse Grinding Wheel (Improved)
4. One Harman Special Oil Stone (Improved)
5. One Saw Gummer (Improved)
6. One Sickle Holding Attachment
7. One Scythe Stone (New)
8. One Harman Special Razor Hone (New)
9. One Disc Grinding Attachment (New)
10. One Tool Rest

We know that every progressive, up-to-date farmer realizes the advantage of always having sharp, bright tools to work with. You know how much more work can be done with tools which are always in good condition. You know how much easier your work is and how much longer your tools last. You know all these things and yet you—**DO** sometimes work with dull tools, don't you? I want to prove to you that you can **easily** keep **all** your farm tools in good condition, **all** the time, with this wonderful, **simply wonderful**, outfit which I will send you **free**.

'How to Grind Edge Tools' Now Sent FREE

A book which should be in the hands of every man who ever ground any tools. It tells you all the secrets of grinding—all of the tricks of the experts. It gives you invaluable information on grinding any tool or removing the rust from any piece of machinery. The book is worth money, but is sent positively free in connection with our free trial offer on the Harman Special Farm Tool Grinder.

Send the coupon at the bottom of this announcement and get this free book anyway. Get it even if you think you might not want to get an Alectride Grinder on free trial. This book explains every detail of our free trial.

It also tells you the wonderful story of Alectride—how a scientist tried to make diamonds in the greatest heat ever generated by man—a heat which melts clay bricks as if they were made of lard—how when the heat was finally turned off and eager search was made for diamonds and how Alectride was found instead. Alectride is hard enough to scratch the diamond.

The scientist who discovered Alectride realized instantly that he had the world's greatest abrasive. Read how tests proved that it would **not draw the temper from steel**—how it would grind twenty-five times faster than the grindstone and eight times faster than emery—how it saved the back breaking work of the grindstone—how it did work in two minutes which could not be accomplished on the grindstone in twenty-five minutes. Read how one man ground six sickles during the noon hour and then had time for dinner and rest. **Get this free book which tells you all these things**—and how to sharpen your edge tools besides. The coupon brings the free book absolutely without any obligations on you.



Send the Coupon
It brings this valuable book

Send This FREE Coupon

REMEMBER
10 DAYS' Free Trial

Send coupon today, get book "How to Grind Edge Tools" free

This book explains all about Alectride, the newest and most wonderful substance known. Don't wait a minute. Send the free coupon today and post yourself on this wonderful offer. Learn all about the Harman Special Alectride Farm Tool Grinder. Sharpen every dull tool on your place positively free. **We let you keep the machine for 10 days, and then if you wish, send it back at our expense.** But mail the coupon today and get our free booklets and circulars, and get our **FREE** trial request book. There is no obligation. You will be amazed at the wonderful results you will get from using Alectride. Anything you sharpen is sharpened better and quicker. Send for our free booklets today. Let us tell you what Alectride is and what it will do with every tool on your farm. Get our free booklets and our special limited offer. Remember 10 days' free trial. **SEND THE FREE COUPON NOW.**

Harman Supply Co. 160 Harrison Street, DEPT 3314 CHICAGO, ILL.

HARMAN SUPPLY CO.

Dept. 3314 160 Harrison St., CHICAGO, ILL.

You may send me free and prepaid your free book "How To Grind Edge Tools," and your offer of a free trial on your Alectride Farm Tool Grinder. This places me under no obligations.

Name _____

Address _____

No Letter Is Necessary; Just Send the Coupon.

Decides in One Day.
Weheville, Wash., July 17, 1910.
Harman Supply Co., Chicago, Ill.:
Gentlemen—There will be no use of my waiting ten days when I can decide in one. Herewith please find my check for \$10.95 in payment for the Farm Grinder. Very truly yours, Dell Hart.

The "Only" Grinder.
Jeddo, Mich., July 11, 1910.
Harman Supply Co., Chicago, Ill.:
Dear Sirs—Received Grinder this morning and am sending you money order for same as I used it and am convinced it is the "only" Grinder. Yours truly, Nat. G. Moore.

Vestal, N. Y., July 22, 1910.
Please find enclosed \$10.95 for your Harman Grinder. It has paid for itself in one haying and harvesting, and I wouldn't like to do without it. It is the cheapest tool on the farm and a tool one needs to use every day in the year. Chas. Burrows.

Very Much Pleased With Its Work.
Hinsdale, Mass., June 23, 1910.
Harman Coal Co.:
Sirs—Find enclosed postoffice order for \$10.95, the price of Grinding Machine. I am very much pleased with the work it does, and like it very much. Yours, etc., C. A. Morgan.



I Guarantee every wheel and part of the running gear to be made of triple A grade Straight Grained Split Hickory—the same grade exactly as this spoke which I send unpainted as a sample of the material used with every Buggy I ship.

Phelps Wants To Send You His Big Buggy Book FREE

IT'S HIS Style Book of Split Hickory Vehicles for 1911—fresh from the printer. Phelps is a practical Buggy designer and manufacturer—he writes these books every year himself—and he says this 1911 Book is the best one he's ever written.

In it he's worked out a new plan of displaying and illustrating many of the important and exclusive features found only on Split Hickory Vehicles.

In this Book for 1911 he takes one of his Vehicles and tears it all to pieces in a lot of photographs, showing you, together with full descriptions—all about every part of a buggy—how it should be made—what it should be made of—and *Phelps knows*

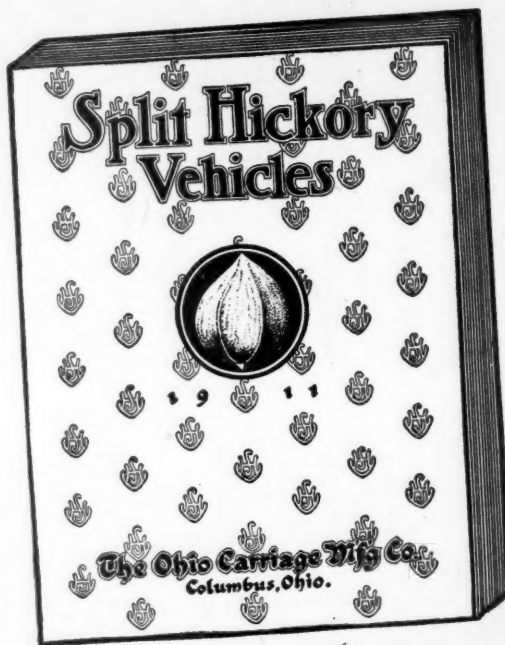
Phelps tells you in his Book just why it is important that you get such wheels on the rig you purchase as he guarantees to put on his Split Hickory Buggies for 1911—which are made of triple A grade straight grained Hickory—a grade found on no "stock" buggy.

See that Split Hickory spoke Phelps holds in his hand? It's a sample spoke (unpainted) that he sends with every buggy he sells—and he guarantees every wheel to be made of the same straight grained second growth Shellbark Hickory as the sample spoke.

This same grade of material he also guarantees to use in the construction of all running gears and other woodwork on his celebrated Split Hickory Vehicles.

and He Pays the Postage

This Book is The Big Show Room of All Styles of Vehicle for 1911



\$25⁰⁰ to \$75⁰⁰ Saved Or No Sale

According To The Style Of Vehicle You Buy

30 Days' Free Road Test—2 Years' Guarantee —and—the Highest Grade That's Made

—that's Phelps' Selling Slogan for 1911.

Phelps is the largest manufacturer in the world manufacturing Vehicles sold direct from factory. He has sold over 125,000 Split Hickory Vehicles to people all over the country who have read his advertisements—as you are doing now.

This 1911 Book of his is the greatest Vehicle Show Room in the world—displaying, for your choice, over 125 styles of a great variety of Auto Seat Buggies—Runabouts—Surreys—Carriages—Phaetons—Spring Wagons—and don't forget—a full line of high grade Harness. This Book contains a greater variety of Vehicles than you could find in ten large towns or in 25 dealers' stores—and Phelps makes them all to order—and sells them direct to you from factory—at a splendid saving in price.

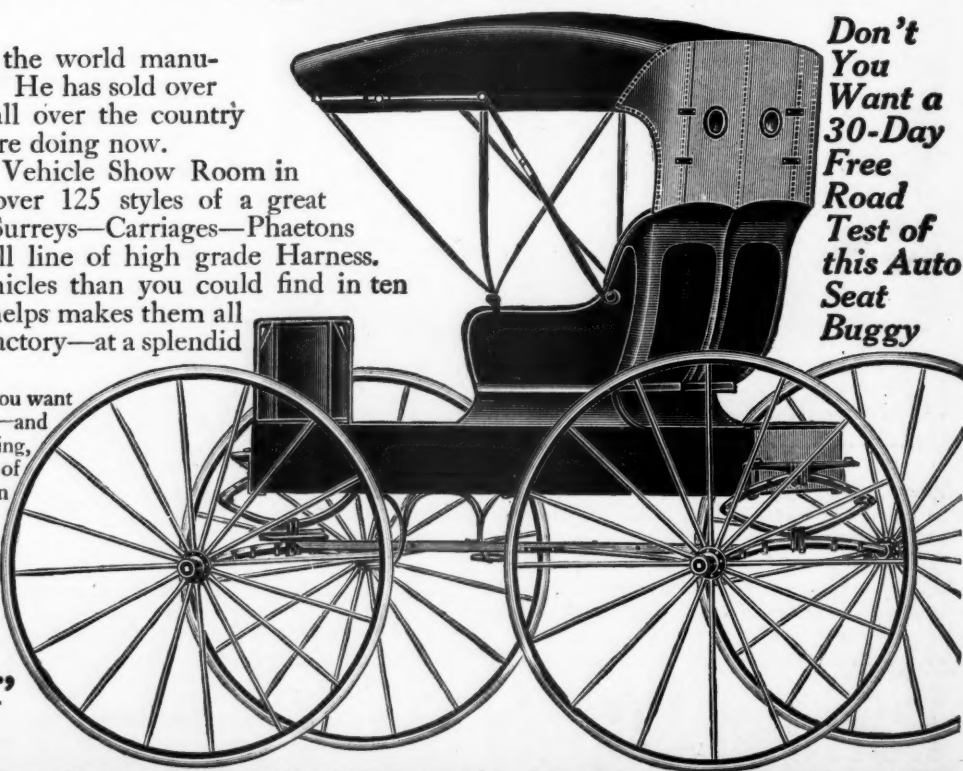
From Phelps you can get what you want—when you want it—not what some dealer happens to have in stock—and you can have many choices in style, finish, upholstery, trimming, etc. Don't you want this Big Display Book of Buggy Styles? Isn't it worth a postal to have this Book in your home for reference? Phelps wants you to have it—FREE—and he pays the postage. Just write him a note or a postal—say—"Phelps, I'd like the book." He will do the rest. Address

H. C. PHELPS, President

The Ohio Carriage Mfg. Co.,

The Largest Buggy Factory in the World Selling Direct to Consumer

Station 26, Columbus, Ohio



Don't You Want a 30-Day Free Road Test of this Auto Seat Buggy

Didn't Have to Reset Tires in Five Years' Use in Kansas.

Stuttgart, Kans., Oct. 12, 1910.

The Ohio Carriage Mfg. Co., Columbus, Ohio.

Gentlemen: Please send to my address one of your catalogues, as I am in the market for a surrey. The buggy I bought of you nearly five years ago is still giving satisfaction. I have never had the tires reset and they are still tight. Yours truly, O. W. Higby.

Has the Best Rig Shipped There.

Loudon, Tenn., May 20, 1910.

The Ohio Carriage Mfg. Co., Columbus, Ohio.

Gentlemen: I received the runabout you shipped me O. K. and have had it 30 days. I am well pleased with it. I think I have the best runabout for the money I have ever seen. I certainly have the best rig for the money that has been shipped here this spring. Yours truly, A. C. Holdridge.